

Preliminary Ecological Appraisal

Survey site:

Land adjacent to David Lloyd, Reading, Berkshire, RG6 1PT

Client:

David Lloyd Leisure Ltd

Survey date:

7th July 2025

Project:

This report is prepared to inform a planning application with the Wokingham Borough Council. The proposal is described as:

The extension of the David Lloyd exercise centre, including courts, swimming pool and spa area

PEA survey methodology and legislation can be found in the Arbtech Supplement: [PEA Methodology and Legislation - 2024.](#)

Site Location and Context					
The survey site is centred on National Grid Reference SU 74377 74237 and has an area of approximately 0.529ha. The site comprises developed land; sealed surface, modified grassland, introduced shrubs and scattered trees. There are scattered trees within the site and extending into the local landscape. It is situated within Thames Valley Business Park and is surrounded by commercial buildings to the east, south and west and Thames Valley Park Nature Reserve to the north. Additionally, water bodies can be found nearby, such as Caversham Lakes (lake) located ~490m to the north and the River Thames also located 280m north of the site. The wider landscape is comprised of a rail line to the south, the town of Reading to the south and west, the village of Caversham to the north and the town of Woodley to the east.					
Survey Details					
The site survey was undertaken by Beth Ellison-Perrett BSc (Hons) MSc, MRSB, Senior Ecologist, an ecologist with four years of experience, and holder of Natural England survey licences for bats [2023-11066-CL17-BAT] and great crested newt [2024-11998-CL08-GCN].					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (mph)	Rain
07/07/2025	17	65	50	14	None
Survey limitations					
It should be noted that whilst every effort has been made to describe the baseline conditions within the survey area, and evaluate these features, this report does not provide a complete characterisation of the site. This assessment provides a preliminary view of the likelihood of protected species being present. This is based on suitability of the habitats on the site and in the wider landscape, the ecology and biology of species as currently understood, and the known distribution of species as recovered during the searches of historical biological records. A biological records data search has not been undertaken. However, given the location of the site, the nature of the habitats present and the assessed suitability of the site for protected or notable species, it is not anticipated that the purchase of biological records data will add any significant weight or alter the conclusions and recommendations outlined in this report. There were no specific limitations to the survey.					
Validity					
The survey, results, and recommendations contained within this report are valid for 18 months. An updated site visit may be required if the report is to be used any longer than 18 months after completion.					

Ecological Survey Factor Conclusion, Impact or Recommendations	Detailed using desk study and site survey (carried out under good weather conditions). Any specific limitations noted within relevant section. This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.
Habitats and plants (see habitat map in appendix 1, location plan in appendix 2, Pond location map in appendix 3, proposal plan in appendix 4 and photos in appendix 5). Botanical species are described with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).	
Summary of Survey Findings (UKHab codes used) - Developed land; sealed surface (u1b) - Building (u1b5) - Modified grassland with introduced shrubs (g4 828) - Scattered trees (u1 32)	Local notable habitats The site does not contain any habitats listed as a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). Habitats within the site are common and widespread and have low ecological value. Notable habitats are present within 2km, including: • Deciduous woodland – located 105m east • Lowland fens – located 455m north • Ancient woodland – located 850m south-east • Woodpasture and parkland – located 1030m north-east • Coastal and floodplain grazing marsh – located 1810m north • Traditional orchards – located 1825m east On-site habitat descriptions u1b – Developed land/sealed surface Located throughout the site, are areas of developed land; sealed surface. The hard standing is comprised of tarmac and is of negligible habitat value for protected species.

	<u>u1b5 – Building</u> There is one existing building on site- the leisure centre (B1). The building was assessed for its habitat value for roosting bats and nesting birds in their relevant sections below. <u>g4 – Modified grassland with introduced shrubs [828]</u> Around the boundary of the site are areas of modified grassland which is subject to management, resulting in a sward of approximately 3cm in length. Species composition is comprised of cocks foot (D), creeping cinquefoil (A), ragwort (A), birds-foot trefoil (A), thistle (F), small-flowered cranesbill (O), goats-hue (O), hogweed (O), oxeye daisy (R), self-heal (R), plantain (R), primrose (R), knapweed (R), dandelion (R) and germander speedwell (R). Additionally, to the west of the site, there is a small area of scattered bramble scrub, which accounts for approximately 5% of the grassland. Along the external boundary of the modified grassland, are areas of introduced shrubs. These are comprised of snowberry, rose, laurestine, firethorn, dog rose, dogwood and buddleia. Modified grassland condition assessment: a) There are 6-8 vascular plant species per m² present, including at least 2 forbs (these may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition. - FAIL b) Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed. - FAIL c) Any scrub present accounts for less than 20% of the total grassland area. - PASS d) Physical damage is evident in less than 5% of total grassland area. - PASS e) Cover of bare ground is between 1% and 10%, including localised areas. - PASS f) Cover of bracken <i>Pteridium aquilinum</i> is less than 20%. - PASS g) There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA). - PASS
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	Score: 5/7 but fails essential criterion A- Poor condition <u>Scattered trees 32</u> Located within the site are two scattered trees, comprised of alder and poplar. Both trees are small in size, semi-mature in age and represent a fair structural condition. Individual trees condition assessment: a) >70% of the trees are native species. b) The tree canopy is predominantly continuous. c) <50% of the trees are mature. d) There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). e) No ecological niches. f) >20% of the tree canopy is oversailing vegetation beneath. Score: 4/6 - Moderate condition
<i>Foreseen Impacts</i>	On-site habitats The habitats on-site are widespread and not notable, however the proposed development will result in the loss of hard standing and two trees. This is likely to have minimal impact on biodiversity considering the small area of commonplace habitat being lost. Furthermore, the trees being felled lack decay features which may provide ecological niches lowering their ecological value. As there are extensive trees within the locality, their loss is unlikely to significantly impact biodiversity. Notable habitats

	No direct impacts to any notable habitats will occur as a result of the proposed development. However, due to the proximity of the site to deciduous woodland (105m east), indirect effects (e.g. pollution, dust, litter, surface run off, etc.) could occur during construction.
<i>Recommendations</i>	On-site habitats Retained trees should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012). Notable habitats Best practice measures to minimise the possibility of pollution affecting the nearby ancient woodland must be implemented during construction. A Construction Environment Management Plan (CEMP) may be required for this. Biodiversity net gain The Environment Act (2021) requires all developments (excluding exemptions) to deliver a 10% net gain in biodiversity. Therefore, the planning application must be accompanied by a landscaping/habitat creation and enhancement strategy, biodiversity net gain calculations and a habitat management and monitoring plan to ensure the proposed development delivers a 10% net gain.
Locality and Designated Sites	
<i>Summary of Survey Findings</i>	On-site designations The site is not subject to any designation. Statutory designated sites (within 2km) There are two known statutory sites within 2km of the site, as detailed below: - Highwood Local Nature Reserves (LNR) - located ~1495m south. The site has exotic tree species which were part of an arboretum (collection of trees) in the house grounds and include giant redwoods and monkey puzzle. It is a fine example of mixed lowland woodland with an attractive heathland area. Birds

	include kingfisher, goosander, pochard, shoveler, cormorant, heron, grey wagtail, waxwing, treecreeper and greater spotted woodpecker - All's Pond LNR - located ~1565m east. Located in an area surrounded by large private gardens and deserts of recreation fields, this wildlife oasis and 18 species of dragonfly and over 40 species of aquatic/wetland plants have been recorded at the site since it's establishment in 1997. Local BAP species which have colonized the site include Great-crested Newt, Harvest Mouse, Stag Beetle, Song Thrush, Pipistrelle Bat and Ragged Robin. The site falls within the Sites of Special Scientific Interest Impact Risk zone, but the proposed plan should not require LPA consultation with Natural England. Non-statutory designated sites The presence of non-statutory designated sites within 2km cannot be established without biological records data from Thames Valley Environmental Centre.
<i>Foreseen Impacts</i>	On-site designations No impacts foreseen. Statutory and non-statutory designated sites No impacts to designated sites are anticipated due to the small scale and distance of the proposed development from such sites (where known) as well as the urban location of the site with surrounding physical barriers.
<i>Recommendations</i>	On-site designations None required. Statutory and non-statutory designated sites

	None required.												
Invasive / Non-native species													
Summary of Survey Findings	Japanese knotweed was identified adjacent to the site (approximately 70m from the development area) which is listed as an invasive, non-native species under Schedule 9 of the Wildlife and Countryside Act 1981.												
Foreseen Impacts	Construction could result in the spread of Japanese knotweed.												
Recommendations	An invasive species management plan will be required to control and/or eradicate Japanese knotweed.												
Invertebrates													
Summary of Survey Findings	The habitats present on-site, including modified grassland, ornamental shrubs and trees, likely provide common invertebrates with opportunities to forage and shelter. The site contains no further notable habitats which may provide niches for specialised or protected invertebrates.												
Foreseen Impacts	Hard standing and two trees will be removed during construction. The loss of such habitats is likely to be inconsequential to local invertebrate populations owing to their low value and the presence of more extensive habitat locally.												
Recommendations	No further surveys.												
Bats													
Summary of Survey Findings	EPSL data A search of the magic.gov.uk database for granted EPSLs within a 2km radius of the site has been completed. Displaced bats from licensed sites <2km away from the survey site will find alternative habitat either within the mitigation measures implemented as part of the licence or will relocate to other known roosts sites in close proximity to the licensed site. There are 13 EPSLs within a 2km radius of site, of which only 3 are within 1km of the site. These three are detailed below: <table><tr><th>EPSL reference</th><th>Bat species affected</th><th>Distance from site</th><th>Impacts allowed by licence</th></tr><tr><td>2015-17476-EPS-MIT</td><td rowspan="3">Brown long-eared bat and soprano pipistrelle</td><td rowspan="3">910m east</td><td rowspan="3">Destruction of a resting place</td></tr><tr><td>2015-17476-EPS-MIT-1</td></tr><tr><td>2015-17476-EPS-MIT-2</td></tr></table>			EPSL reference	Bat species affected	Distance from site	Impacts allowed by licence	2015-17476-EPS-MIT	Brown long-eared bat and soprano pipistrelle	910m east	Destruction of a resting place	2015-17476-EPS-MIT-1	2015-17476-EPS-MIT-2
EPSL reference	Bat species affected	Distance from site	Impacts allowed by licence										
2015-17476-EPS-MIT	Brown long-eared bat and soprano pipistrelle	910m east	Destruction of a resting place										
2015-17476-EPS-MIT-1													
2015-17476-EPS-MIT-2													

	2020-48694-EPS-MIT	Common pipistrelle and soprano pipistrelle	915m east	Destruction and damage of a resting place
	2020-48353-EPS-MIT	Soprano pipistrelle	990m east	Destruction of a resting place
There are no Special Areas of Conservation designated for bats within 10km of the site. Foraging and commuting habitat Habitats recorded on site are assessed to provide foraging and commuting opportunities for bats in the form of species-poor modified grassland, scattered trees and scattered shrub. These habitats are likely to provide micro-climatic conditions that support invertebrates that will in turn provide foraging opportunities for local bat populations. Most notably, the trees on site extend beyond the site adding to the continuity of vegetated linear features present in the wider landscape. Bats are well known to utilise linear features to aid navigation whilst travelling between foraging resources and roost sites. The local area is of good bat habitat with significant woodland, linear commuting routes and other foraging areas, including lakes and the river Thames. Roosting habitat B1 is a detached leisure centre which is comprised of part three-storey, part two-storey brick and metal-built building with a flat roof clad in corrugated metal sheeting. The roof sheeting is in very good condition with no raised tiles under which bats could roost. The doors and windows are metal framed and appear in excellent condition with no suitable bat roosting sites. The brickwork around the building appears in excellent condition with no gaps or cracks within which crevice-dwelling bats could roost. There is no loft space within B1 as the roof is flat and single skinned. No evidence of roosting bats was identified on or within B1 or on any of the surveyed trees on-site. Additionally, the trees being felled lack decay features which may provide ecological niches lowering their ecological value.				
<i>Foreseen Impacts</i>	Roosting habitat [Buildings] Bats are very unlikely to be roosting within this building and as such, there are not anticipated to be any impacts on bats in this location as a result of the proposed development.			

	Roosting habitat [Trees] Two trees will be felled to facilitate the development. No features were identified on these trees and as such there are unlikely to be any impact to bats as a result of felling. Foraging and commuting habitat The proposed development will result in the loss of hard standing and one tree but given their low value and the presence of more extensive areas of foraging and commuting habitat in the locality, this is likely to be inconsequential for bats. Artificial lighting The proposed development may lead to an increase in the amount of current lighting of surrounding habitats or the retained building without mitigation. This may disturb commuting bats.
<i>Recommendations</i>	Roosting habitat [Building and Trees] In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop and a bat licensed ecologist contacted for further advice. Foraging and commuting habitat No further surveys are required. Artificial lighting A low impact lighting strategy will be adopted for the site during post-development which outlines the areas of the site that will be retained as dark corridors. Parameters can be found on the Bat Conservation Trust website: https://www.bats.org.uk/our-work/buildings-planning-and-development/lighting-2 Suggested biodiversity enhancements

	The installation of two bat boxes at the site will provide additional roosting habitat for bats. The bat boxes will be incorporated into the fabric of the new buildings. They will be suitable for pipistrelles (which have been identified locally through EPSL data). Suitable bat boxes include Habibat Bat Box, Ibstock Enclosed Bat Box or similar alternative brand. Bat boxes should be positioned 3-5m above ground level facing in a south or south-westerly direction with a clear flight path to and from the entrance, away from artificial light.
Birds	
<i>Summary of Survey Findings</i>	Trees and vegetation No bird nests were identified within the trees on-site, however they all offer nesting opportunities and nest-building resources for birds. Barn owls The site does not appear to provide any suitable nesting sites for barn owls. Overwintering birds Due to the extent and type of the habitats recorded, the site not considered suitable to support a significant assemblage of protected and/or notable birds.
<i>Foreseen Impacts</i>	Trees The proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests. Barn owls and Overwintering birds None foreseen.
<i>Recommendations</i>	Trees

	Any tree removal should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the vegetation should be undertaken immediately, by a qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged. Precautions should be taken with machinery and noise levels when working close to any retained nests so as not to disturb any nearby nesting birds during construction works. At least a 3-5m buffer should be created between any machinery and active nests until the young have fledged. Barn owls and Overwintering birds None required. Suggested biodiversity enhancements The installation of a minimum of two bird boxes on the new buildings will provide additional nesting habitat for birds e.g. Schwegler No 17 Swift Nest Box, Schwegler 1SP Sparrow Terrace, Woodstone Nest Box, or a similar alternative brand. Tree boxes should be positioned approximately 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight. Small-hole boxes are best placed approximately 1-3m above ground on an area of the tree trunk where foliage will not obscure the entrance hole. Swift and sparrow boxes should be positioned at the eaves of a building and can be incorporated into the fabric of the building during construction.
Reptiles	
Summary of Survey Findings	EPSL data A review of the MAGIC database returned no granted EPSL records for protected reptiles within 2km of the site. Habitat suitability

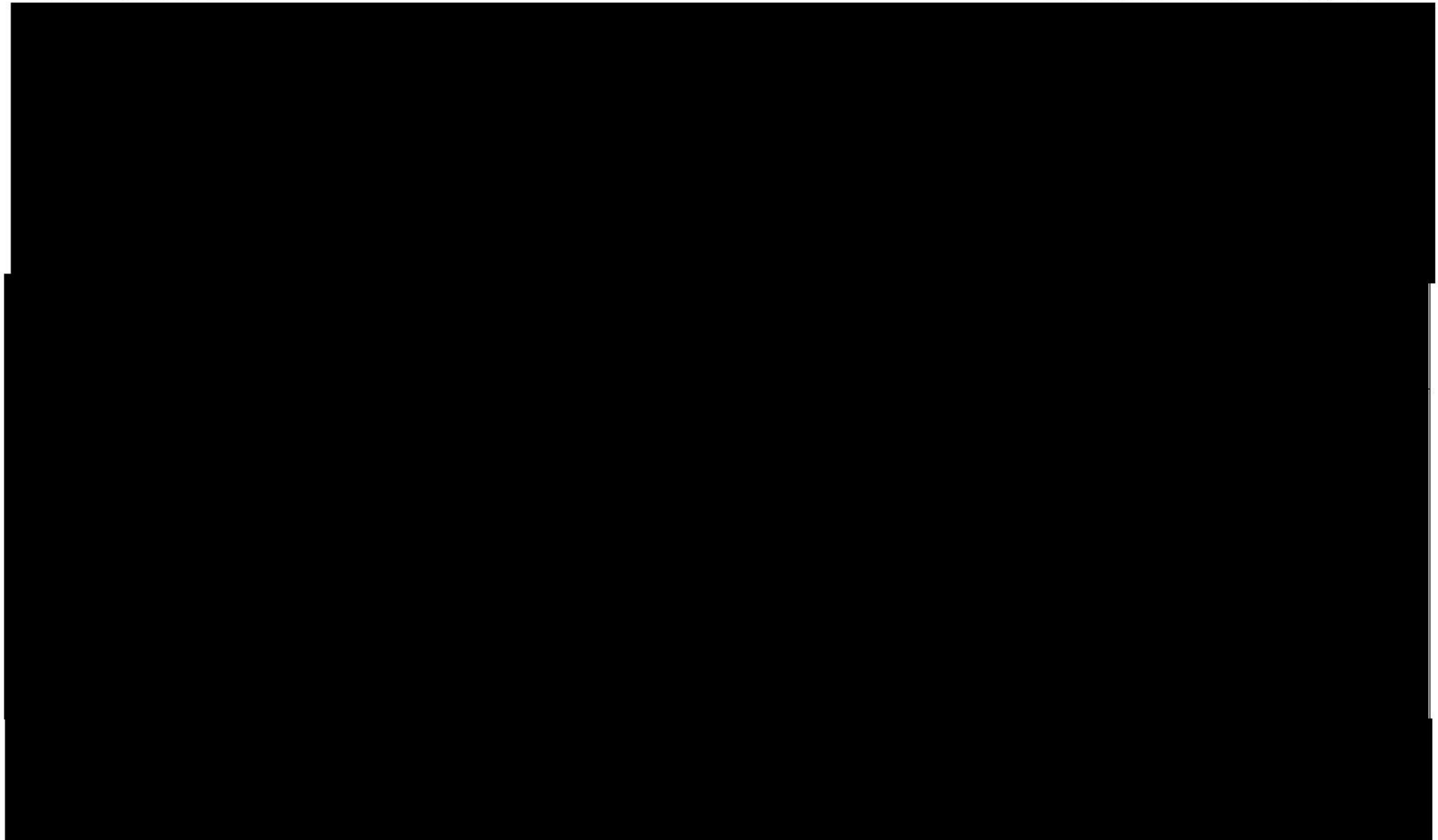
	There is no suitable habitat present on site for reptiles due to a lack of habitats such as scrub and rank grassland which would offer refuge for these species. Additionally, the modified grassland is considered unsuitable for reptiles due to the species content (common and widespread species with minimal diversity) and associated management regime, where at the time of the survey the grassland was recorded as being a relatively short sward. Given the management regime employed on the modified grassland, as well as the species composition, it is considered unlikely that this faunal group would be present within this habitat. Furthermore, it is important to note that the site is dominated by artificial unvegetated, unsealed surface and hardstanding of limited value to reptiles. These habitats are suboptimal due to an absence of notable habitat structure and diversity, which significantly limits refuge, foraging, and commuting opportunities, albeit they do provide some basking opportunities when located adjacent to potential refugia. The site has some connectivity to further suitable reptile habitat in the wider landscape, mainly to the north of the site as it is adjacent to grassland, pockets of woodland and lakes. However, the remaining boundaries of the site are surrounded by urban development (i.e. roads and buildings) which is considered sub-optimal for reptile migration and therefore reptiles are considered unlikely to migrate from any nearby suitable habitats to the development site.
<i>Foreseen Impacts</i>	Hard standing and two trees will be removed during construction. The loss of such habitats is likely to be inconsequential to local reptile populations owing to their low value and the presence of more extensive habitat locally. However, site clearance could result in the death or injury of reptiles, if present. The site does not form a connective pathway or stepping stone between areas of suitable reptile habitat in the wider landscape and the development is unlikely to lead to reptile habitat fragmentation.
<i>Recommendations</i>	A precautionary working method will be implemented for widespread reptiles during construction, including the following measures: • Vegetation will be maintained at a short sward (5cm) to discourage reptiles. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • Best practice pollution prevention measures will be implemented to minimise impacts to nearby habitats. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.

	• If any reptiles are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance. • In the unlikely event that a reptile is identified, works must cease and advise must be sought from a suitably qualified ecologist.									
Amphibians										
Summary of Survey	EPSL and survey data									
Findings	A review of the MAGIC database returned no granted EPSL records for great crested newts within 2km of the site. However, the MAGIC database did return evidence indicating the presence of great crested newts resulting from historic pond surveys undertaken in 2015. These records are located 1430m east. Great crested newts exist in metapopulations and are known to utilise ponds and their connecting terrestrial habitat during their life cycle; great crested newts are typically found within terrestrial habitats up to 500m from breeding ponds (Langton <i>et al.</i> 2001). As such, the great crested newt metapopulation known to be present 1430m east are not suitably connected to the site. Aquatic habitat suitability (including ponds within 500m) Great crested newts (GCN) exist in metapopulations and are known to utilise ponds and their connecting terrestrial habitat during their life cycle; great crested newts are typically found within terrestrial habitats up to 500m from breeding ponds (Langton et al. 2001). There are no ponds on the site, but a review of aerial imagery (MAGIC and OS Maps) indicates the presence of 17 ponds within 500m, these are detailed below: <table><tr><th>Pond Number</th><th>Distance from site</th><th>Connectivity to site</th></tr><tr><td>P1</td><td>28m north</td><td>Terrestrial connectivity to the site due to an absence of definitive barriers to dispersal.</td></tr><tr><td>P2</td><td>109m south</td><td>Limited connectivity to the site due to being separated by a road with high kerbs. However, this road is not busy, and the pond is surrounded by introduced shrubs and managed grassland.</td></tr></table>	Pond Number	Distance from site	Connectivity to site	P1	28m north	Terrestrial connectivity to the site due to an absence of definitive barriers to dispersal.	P2	109m south	Limited connectivity to the site due to being separated by a road with high kerbs. However, this road is not busy, and the pond is surrounded by introduced shrubs and managed grassland.
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P2	109m south	Limited connectivity to the site due to being separated by a road with high kerbs. However, this road is not busy, and the pond is surrounded by introduced shrubs and managed grassland.								

	P3	114m south	Limited connectivity to the site due to being separated by a road with high kerbs. However, this road is not busy, and the pond is surrounded by introduced shrubs and managed grassland.
	P4	173m south-east	Separated from the site by urban development including buildings, hard standing and roads with high kerbs.
	P5	185m north-east	Potential terrestrial connectivity to the site due to an absence of definitive barriers to dispersal, although separated by intensively managed grassland. Additionally, ponds P5, P9 and P11 are linked together through small ditches.
	P6	190m west	Limited connectivity to the site due to being separated by a road with high kerbs. However, this road is not busy, and the pond is surrounded by introduced shrubs and managed grassland.
	P7	200m south-east	Separated from the site by urban development including buildings, hard standing and roads with high kerbs.
	P8	205m east	Limited connectivity to the site due to being separated by a road with high kerbs. However, this road is not busy, and the pond is surrounded by introduced shrubs and managed grassland.
	P9	210m north-east	Potential terrestrial connectivity to the site due to an absence of definitive barriers to dispersal, although separated by intensively managed grassland. Additionally, ponds P5, P9 and P11 are linked together through small ditches.
	P10	220m south	Separated from the site by urban development including buildings, hard standing and roads with high kerbs.
	P11	235m south-west	Potential terrestrial connectivity to the site due to an absence of definitive barriers to dispersal, although separated by intensively managed grassland. Additionally, ponds P5, P9 and P11 are linked together through small ditches.

	P12	285m north-east	Potential terrestrial connectivity to the site due to an absence of definitive barriers to dispersal, although separated by intensively managed grassland. Additionally, ponds P12, P13, P15, P16 and P17 are linked together through small ditches.
	P13	320m north-east	Potential terrestrial connectivity to the site due to an absence of definitive barriers to dispersal, although separated by intensively managed grassland. Additionally, ponds P12, P13, P15, P16 and P17 are linked together through small ditches.
	P14	345m north	Separated from the site by the river Thames.
	P15	400m north-east	Potential terrestrial connectivity to the site due to an absence of definitive barriers to dispersal, although separated by intensively managed grassland.
	P16	445m north-east	Potential terrestrial connectivity to the site due to an absence of definitive barriers to dispersal, although separated by intensively managed grassland.
	P17	451m north-east	Potential terrestrial connectivity to the site due to an absence of definitive barriers to dispersal, although separated by intensively managed grassland.
	A pond map showing approximate pond locations is provided in Appendix 3. Terrestrial habitat suitability The site provides limited suitable terrestrial habitat for amphibians given the lack of optimal habitat (i.e. scrub, rank grassland). The areas of hard standing and grassland offer sub-optimal habitat for terrestrial amphibians. The introduced shrubs may offer refuge for these species, however given the urban nature of the surrounding landscape (i.e. dominated by roads and hard standing which are sub-optimal for amphibians) it is unlikely that amphibians will migrate on to site. Moreover, the adjacent habitats to the north have ecological value within the wider landscape and provide foraging, commuting, and refuge opportunities for amphibians and are well connected to further suitable habitat in the wider landscape including woodland to the north-west of the site. Therefore, the site is not isolated from the wider landscape meaning amphibians could disperse from the site into		

	adjacent suitable habitats to the north. The loss of habitats onsite is likely to be inconsequential to local amphibian populations owing to the presence of more extensive habitat locally. Additionally, the site does not form a connective pathway or stepping stone between areas of suitable habitat in the wider landscape and the development is unlikely to lead to habitat fragmentation.
<i>Foreseen Impacts</i>	It is noted that the site is dominated centrally by a single building, and hardstanding of low value to amphibians due to an absence of refuge from predation. Hard standing and two trees will be removed during construction. When georeferencing the proposed development plans over scaled mapping of the site, it is noted that the development area is likely to result in the loss or significant disturbance of 0.04221ha of hard standing. The loss of such habitats (hard standing) is likely to be inconsequential to local amphibian populations owing to their low value and the presence of more extensive habitat locally.
<i>Recommendations</i>	Owing to the nature of the proposed development and the low potential for impacts to great crested newts, further surveys are considered to be disproportionate. A precautionary working method will be implemented for common amphibians during construction, including the following measures: • The vegetation onsite must be maintained at a short sward for the duration of construction to deter amphibians from the working area. • Any rubble piles will be dismantled by hand and debris and brash will be stored on pallets or removed from the site to prevent amphibians from utilising these areas. • Best practice pollution prevention measures will be implemented to minimise impacts to nearby aquatic habitats that amphibians could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • If any common amphibians are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance. • In the unlikely event that a great crested newt is identified, works must cease and advice must be sought from a suitably qualified ecologist.

**Riparian animals**

<i>Summary of Survey Findings</i>	A review of the MAGIC database returned no granted EPSL records for otters or water voles within 2km of the site. There are no water courses on or connected to the site. There are also no riparian habitats present on site or within an influencing distance.
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<i>Foreseen Impacts</i>	No impacts are anticipated on riparian animals as a result of the proposed development.
<i>Recommendations</i>	None required.
Hazel dormouse	
<i>Summary of Survey Findings</i>	EPSL data A review of the MAGIC database returned no granted EPSL records for hazel dormice within 2km of the site. Habitat suitability Dormice typically utilise a three-dimensional habitat structure as to commute between feeding and breeding sites whilst avoiding predation. As such habitats on site are considered unsuitable for hazel dormice and therefore the likelihood of this species being present on site is considered acceptably low. Furthermore, for isolated habitats in the UK, research indicates that dormice require 20ha of woodland habitat to support a viable population (Bright <i>et al.</i> 1994). 20ha of woodland is not present on or directly adjacent to the site. The site is enclosed by urban infrastructure including roads and significant residential development. These landscape features fragment suitable dormice habitat in the wider landscape and are likely to limit dispersal opportunities to the site. As such it is considered likely that hazel dormice are absent from site.
<i>Foreseen Impacts</i>	No impacts are anticipated on hazel dormice as a result of the proposed development.
<i>Recommendations</i>	None foreseen.
Other e.g. hedgehog	
<i>Summary of Survey Findings</i>	No evidence of hedgehogs was found on site. The habitat recorded onsite provides suitable, albeit limited commuting and foraging opportunities for hedgehogs in the form of grassland and tree lined boundaries. The site is connected to suitable habitat for hedgehogs including woodlands in the further landscape. Although no evidence indicating the presence of hedgehogs was recorded, access to on-site habitats is available for hedgehogs. The future presence of foraging and commuting hedgehogs for transient periods cannot be discounted.
<i>Foreseen Impacts</i>	Hard standing and two trees will be removed during construction. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of hedgehogs, if present.

<i>Recommendations</i>	Similar to the [REDACTED] a precautionary working method will be implemented during construction, including the following measures: • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which hedgehogs could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. If any hedgehogs are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance. Suggested biodiversity enhancements The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for hedgehogs: • Planting fruit bearing trees and species-rich grassland to increase foraging opportunities. • Creation of brash piles or installation of hedgehog houses in shady areas. • Installation of gaps under boundary fencing to enable hedgehogs to move freely through the site.
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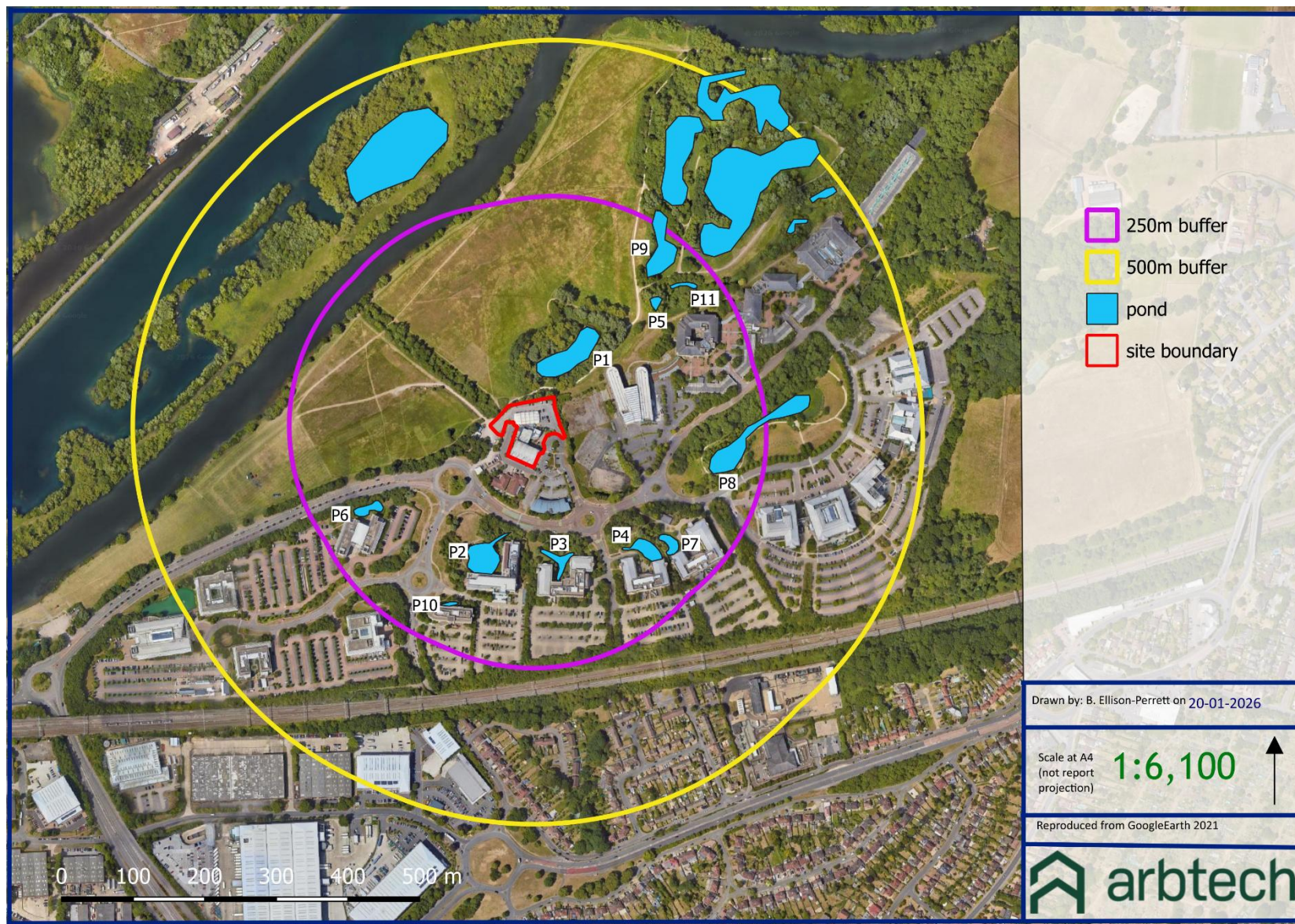
Appendix 1: Survey/Habitat map

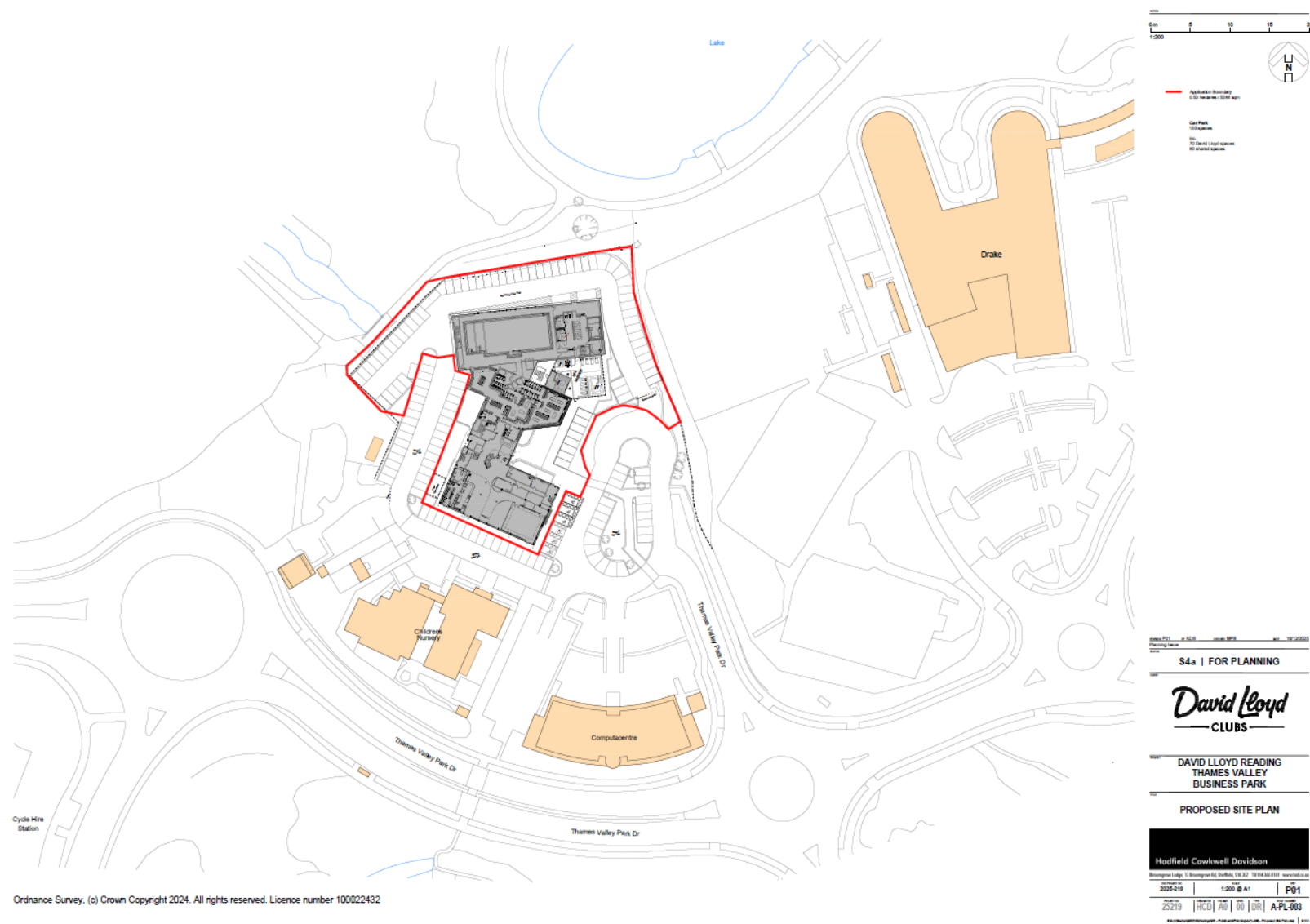


Appendix 2: Location map



Appendix 3: Pond location map





Appendix 5: Habitat Photos

Developed land; sealed surface	
Photograph	Description
	Hard standing onsite
Building	
Photograph	Description
 	Building (B1) onsite
Modified grassland	

Photograph	Description
	Modified grassland onsite
Introduced shrubs	
Photograph	Description
	Introduced shrubs on site (along the boundaries)
Scattered trees	
Photograph	Description

	Scattered trees present on site (along eastern site boundary)
Japanese knotweed	
Photograph	Description
	Japanese knotweed, adjacent to the site to the north

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