TIM MOYA ASSOCIATES

Preliminary Ecological Appraisal

Including:
Extended Phase 1 Habitat Assessment
Bat Scoping Assessment
Great Crested Newt HSI Survey

Haydon House
296 Joel Street, Pinner
London
HA5 2PY

October 2022

220666-ED-01a

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Tim Moya Associates standard Limitations of Service apply to this report and all associated work relating to this site. A copy has been supplied with our original quotation and further copies are available on request.

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1 NON-TECHNICAL SUMMARY

1.1 This report assesses the ecological value of the proposed development site at Haydon House, Pinner. The proposed development involves the demolition of an existing office building and the erection of a new block of flats.

1.2 The site survey included an assessment of the habitats found within the site and its immediate surroundings and the likely impact of the proposed development on habitats of ecological value and protected and notable species.

1.3 This report is broadly considered valid for a duration of eighteen months, although some ecological factors may change within shorter timescales.

1.4 The site is dominated by a building, hardstanding, and bare ground habitats.

1.5 The site contains potentially suitable habitat for the following protected species: bats, common invertebrates, hedgehogs, and nesting birds.

1.6 Notable designated sites close by include Ruislip Woods SSSI NNR which lies 0.3 km west of the site, and River Pinn near Eastcote SINC which lies 10 m east of the site.

1.7 The proposed development is due to result in the loss of bare ground, building, trees, ephemeral/short perennial vegetation, and hardstanding habitats.

1.8 **Recommendations:**

- Trees should be replaced wherever possible.
- Features suitable for bats are present within the building on site. To confirm whether bat roosts are present, an emergence/re-entry survey should be undertaken between May and August.
- To avoid an impact on commuting and foraging bats, it is recommended that lighting is designed to minimise illumination of suitable habitats.
- Vegetation and buildings suitable for nesting birds may only be removed during the nesting season if they have been checked by an ecologist and no nests are present.
- Care should be taken when removing brash or dense vegetation to avoid harm to hedgehogs which may be present. Additionally, where possible, boundary habitats such as hedgerows should be implemented instead of, or adjacent to, fences and walls.
- The invasive plant species buddleja (*Buddleja davidii*) was recorded within the site. To avoid spreading this plant, it should be disposed of responsibly.
- Recommendations are included at the end of this report for measures to enhance the site for local biodiversity.

2 INTRODUCTION

Background

2.1 This report has been instructed by Westgold Holdings Ltd.

2.2 The proposed development involves the demolition of an existing office building and the erection of a new block of flats.

Purpose of the report

2.3 This report assesses the ecological interest of the site and the potential impacts of the proposed development on biodiversity.

2.4 Ecological surveys are sequential in nature and any follow up, species-specific reports will supersede the information present in this report, even if both are submitted together.

2.5 TMA have been instructed to undertake a Preliminary Ecological Appraisal - a method of ecological assessment outlined in the CIEEM Guidelines for Preliminary Ecological Appraisal (2017)[1]. These guidelines state that the aims of the Preliminary Ecological Appraisal are to identify key ecological constraints associated with a project; identify any mitigation measures likely to be required; identify any additional surveys that may be required; and identify opportunities to deliver ecological enhancement.

2.6 This report aims to satisfy the requirements of the National Planning Policy Framework (MHCLG, 2021)[2], identifying ecological features or protected species within or near the site that could potentially be impacted by the proposed development and opportunities for incorporating biodiversity enhancements into the development proposals.

2.7 This report has been produced with reference to current guidelines for preliminary ecological appraisal (CIEEM, 2017) and with Biodiversity - Code of Practice for Planning and Development (BSI, 2013)[3].

2.8 To provide information to support the ecological assessment, a bat scoping survey and great crested newt (*Triturus cristatus*) (GCN) Habitat Suitability Index (HSI) assessment have also been undertaken.

Limitations

2.9 The site was accessed during August, a time when the majority of plant species would be expected to be evident, particularly extensive stands of invasive species such as Japanese knotweed (*Fallopia japonica*) or giant hogweed (*Heracleum*

1 - CIEEM (2017). Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
2 - Ministry of Housing, Communities and Local Government (2021). National Planning Policy Framework.
3 - British Standards Institution (2013). BS42020 – Biodiversity – Code of practice for planning and development.

mantegazzianum). Where further botanical or invasive species surveys are considered necessary, these have been recommended within this report.

2.10 The loft void of the existing building could not be accessed during the survey due to the presence of a suspended ceiling. The remainder of the site was fully accessed.

2.11 As the attributes of the site and its potential for protected, notable and invasive species may change over time, this report is broadly considered valid for a duration of **eighteen months**, after which time it is recommended that an update site assessment is undertaken. In some cases, protected or invasive species' use of a site may change over a shorter timescale, for instance the extent of invasive plant species, which may change month to month. In such cases, appropriate precautionary advice or recommendations for update surveys are given within this report. Although invasive plant species have been recorded if observed within the site, we cannot guarantee that all occurrences have been found.

Information supplied

2.12 This report has been prepared with reference to the following supplied documents/plans, showing the extent of the site boundary and the proposed development (at this stage). Please note the below-named plans may be superseded or updated without warranting an update of this report, if the changes are insignificant to the impact of the development on biodiversity:

- Existing site plan, CIAO, 13/05/2022 (166-3EX-01)
- Proposed site plan, CIAO, 23/06/2022 (166-3GA-00)
- Proposed ground floor plan, CIAO, 23/06/2022 (166-3GA-01)

Site location

2.13 The site is located within a residential area in the London Borough of Hillingdon. It is bordered by Joel Street to the east, and residential properties to the south, west, and north. Haydon Hall Park and Eastcote House Gardens lie on the other side of Joel Street. The River Pinn runs 136 m south-east of the site. The wider area consists primarily of residential development, however there are areas of open green space interspersed, and the landscape becomes increasingly rural to the west toward Harefield. There the landscape is dominated by arable land and woodland, and the site is separated from this landscape by Ruislip Woods (which lies 316 m east of the site).

2.14 The central grid reference for the site is TQ 10478 88831. The surveyed site covers approximately 0.1 hectares.

3 RELEVANT LOCAL PLANNING POLICY

London Borough of Hillingdon Local Plan Part 2 - Development Management Policies (Adopted Version 16 January 2020)

3.1 **Policy DMHB 14: Trees and Landscaping**

3.2 A) All developments will be expected to retain or enhance existing landscaping, trees, biodiversity or other natural features of merit.

3.3 B) Development proposals will be required to provide a landscape scheme that includes hard and soft landscaping appropriate to the character of the area, which supports and enhances biodiversity and amenity particularly in areas deficient in green infrastructure.

3.4 C) Where space for ground level planting is limited, such as high rise buildings, the inclusion of living walls and roofs will be expected where feasible.

3.5 D) Planning applications for proposals that would affect existing trees will be required to provide an accurate tree survey showing the location, height, spread and species of trees. Where the tree survey identifies trees of merit, tree root protection areas and an arboricultural method statement will be required to show how the trees will be protected. Where trees are to be removed, proposals for replanting of new trees on-site must be provided or include contributions to offsite provision.

3.6 **Policy DMEI 1: Living Walls and Roofs and on-site Vegetation**

3.7 All development proposals are required to comply with the following:

3.8 i) All major development (residential development of 10 dwellings or more; any building with a floor space of 1000 square metres or more; development on a site of 1 hectare or more) should incorporate living roofs and/or walls into the development. Suitable justification should be provided where living walls and roofs cannot be provided; and

3.9 ii) Major development in Air Quality Management Areas must provide onsite provision of living roofs and/or walls. A suitable offsite contribution may be required where onsite provision is not appropriate.

3.10 **Policy DMEI 7: Biodiversity Protection and Enhancement**

3.11 A) The design and layout of new development should retain and enhance any existing features of biodiversity or geological value within the site. Where loss of a significant existing feature of biodiversity is unavoidable, replacement features of equivalent biodiversity value should be provided on-site. Where development is constrained and cannot provide high quality biodiversity enhancements on-site, then appropriate contributions will be sought to deliver off-site improvements through a legal agreement.

3.12 B) If development is proposed on or near to a site considered to have features of ecological or geological value, applicants must submit appropriate surveys and assessments to demonstrate that the proposed development will not have unacceptable effects. The development must provide a positive contribution to the protection and enhancement of the site or feature of ecological value.

3.13 C) All development alongside, or that benefits from a frontage on to a main river or the Grand Union Canal will be expected to contribute to additional biodiversity improvements.

3.14 D) Proposals that result in significant harm to biodiversity which cannot be avoided, mitigated, or, as a last resort, compensated for, will normally be refused.

4 SURVEY METHODOLOGY

Data Searches

4.1 The government's MAGIC search tool was searched for statutory sites designated for nature conservation interest within 7 km of the site, and for records of European Protected Species licences within 2 km of the site.

4.2 Greenspace Information for Greater London (GIGL) was consulted for records of non-statutory sites designated for nature conservation interest and for historic records of protected or notable species within 2 km of the site.

Site Survey

4.3 The survey was undertaken on 19 August 2022 by Tom Haley, an experienced Ecologist. During the survey the weather conditions were not considered to pose any limitations to the survey.

4.4 The vegetation and habitat types within the site were noted during the survey in accordance with the categories specified by the JNCC[4]. Dominant plant species were recorded for each habitat present.

4.5 The site was inspected for evidence of and its potential to support protected or notable species[5] including amphibians, reptiles, bats, badgers, birds, dormice and water voles. Evidence of badgers was searched for throughout the site, including setts, footprints, feeding signs, hairs and droppings.

4.6 The site was searched for evidence of invasive plant species, such as Japanese knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*), giant hogweed (*Heracleum mantegazzianum*), horizontal/wall cotoneaster (*Cotoneaster horizontalis*) and floating pennywort (*Hydrocotyle ranunculoides)*.

GCN HSI Assessment

4.7 The great crested newt habitat suitability index (HSI) assessment was undertaken based on methodologies detailed in Oldham *et al*., 2000[6]. The HSI is a quantitative measure of the suitability of a pond to establish the likelihood of GCN being present. The assessment is based on ten factors including pond area, shade, terrestrial habitat and water quality. The resulting index for each pond is expressed as a figure between 0 and 1, with scores below 0.5 indicating poor suitability for GCN and above 0.8 indicating excellent suitability.

4 - Joint Nature Conservation Committee (2010). Handbook for Phase 1 habitat survey. A technique for environmental audit.
5 - Especially those listed under The Conservation of Habitats and Species Regulations 2017, the Wildlife & Countryside Act 1981 (as amended), including those given extra protection under the Natural Environment and Rural Communities (NERC) Act 2006 and Countryside & Rights of Way (CRoW) Act 2000, and listed on the UK and local Biodiversity Action Plans.
6 - Oldham, R.S., Keeble, J., Swan, M.J.S. & Jeffcote, M. (2000). Evaluating the suitability of habitat for the Great crested Newt (Triturus cristatus). Herpetological Journal 10 (4), 143-155.

4.8 All ponds within a 500 m radius of the proposed development, where access was possible, were inspected, unless they were considered to be sufficiently separated from the development site that the dispersal of GCN into the site was considered highly unlikely.

Bat Scoping Survey

4.9 The bat scoping survey was undertaken in accordance with BCT Guidance[7]. The buildings were inspected externally from all angles using binoculars and internally using a high-powered torch. Trees were inspected from ground level, using binoculars where needed and a high-powered torch to inspect potential bat roost features. All aspects of each tree were viewed, and wherever visibility was restricted (e.g. due to ivy or foliage), this is stated in the report.

4.10 Evidence searched for included bat droppings, feeding remains, staining from urine or grease marks and potential access points into roosting cavities. Features indicating potential for bat roosts included gaps beneath roof tiles, weatherboarding and/or hanging tiles, missing mortar, holes in tree trunks, cracks in tree limbs, loose bark and dense ivy growth.

7 - Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London.

5 DESK STUDY RESULTS

Designated Sites

5.1 The site itself is not covered by any statutory or non-statutory nature conservation designations.

5.2 There are thirty-one statutory designations within 7 km of the proposed development and nineteen non-statutory designations within 2 km of the proposed development as follows:

Table 1. Statutory designations of nature conservation interest

Closest statutory sites:			
Site name	**Designation**	**Distance and direction from proposed works (km)**	**Description**
Ruislip Woods	SSSI, NNR	0.3 W	The Ruislip Woods form an extensive example of ancient semi-natural woodland, including some of the largest unbroken blocks that remain in Greater London. It contains other semi-natural habitats such as acidic grass-heath mosaic and areas of wetland. These habitats and especially the woodland contain a number of plant and insect species that are rare or scarce in a national or local context including species of moths (Lepidoptera), beetle (Coleoptera), and two-winged flies (Diptera). The Ruislip Woods also support a diverse range of breeding birds characteristic of woodland habitat. The large extent of the woods and the presence of adjoining open habitats provide particularly suitable conditions for several of the less common breeding species.
Ruislip	LNR	0.6 S	Ruislip Local Nature Reserve supports a species-rich association of willow carr, tall fen, and swamp communities. Additional diversity is provided by the juxtaposition of the woodland with areas of acidic grassland, neutral grassland and open heath.

Closest statutory sites:			
Site name	**Designation**	**Distance and direction from proposed works (km)**	**Description**
Other statutory designations: Eight further SSSIs and twenty further LNRs are located between 0.0 km and 7.0 km from the proposed development site.			
Key: SSSI - Site of Special Scientific Interest NNR - National Nature Reserve LNR - Local Nature Reserve			

Table 2. Non-statutory designations of nature conservation interest

Closest non-statutory sites:			
Site name	**Designation**	**Distance and direction from proposed works (km)**	**Description**
River Pinn near Eastcote	SINC	0.01 NE	The River Pinn enters Hillingdon from Cuckoo Hill Walk in West Harrow, and flows through a series of open spaces, forming a valuable green corridor. Habitats include amenity grassland, bare ground, running water, scattered trees, scrub, secondary woodland, semi-improved neutral grassland, and tall herbs. The large red damselfly (Pyrrhosoma nymphula), chiffchaff, and orange tip butterfly also occur here. Common blue damselfly, goldcrest, and chaffinch occur here and there are small fish in the river. This site is freely accessible to the public.
Haydon Hall Meadows	SINC	0.24 NE	A series of lightly cattle-grazed meadows, an orchard, and river corridor in the grounds of Haydon Hall. A wide variety of insects use these good quality grasslands including diverse solitary bees, hoverflies and dung-beetles and butterflies such as common blue and meadow brown. The birdlife includes goldfinch and chiffchaff.
Ruislip Woods and Poor's Field	SINC	0.31 W	The largest block of ancient woodland in London, with adjacent areas of acid grassland, heathland and wetlands. Ruislip Lido is a substantial body of open water, with a reed bed at the northern end and fairly diverse marginal vegetation. The avifauna of the site is diverse, with breeding sparrowhawk, tawny owl and occasionally woodcock and wood warbler. There is also an important invertebrate fauna including several nationally rare and scarce species. It is one of London's most important sites for specially-protected bats (with at least nine species recorded) and reptiles. Most of the

Closest non-statutory sites:			
Site name	**Designation**	**Distance and direction from proposed works (km)**	**Description**
			site is a National Nature Reserve, and there is free public access.
Fore Street Meadows	SINC	0.4 NW	This site comprises two grazing fields situated on the east margin of Park Wood (part of Ruislip Woods National Nature Reserve). Situated near the south end is a vegetated ditch and associated damp areas, dominated by floating sweet-grass (Glyceria fluitans), which are likely to provide habitats for a range of invertebrates. The value of these fields is augmented by their proximity to Park Wood, part of Ruislip Woods National Nature Reserve, to which they provide an important buffer zone. In addition to habitats for saproxylic and wetland invertebrates the site is likely to provide nectar sources and swarming sites for uncommon insects associated with the ancient woodland. The site is inaccessible to the public, except for the public footpath which bisects it.
Fifteen further SINCs are located between 0.0 km and 2.0 km from the proposed development site.			
Key: SINC - Site of Importance for Nature Conservation			

Historic Species Records

5.3 Local Ecological Records Centre data searches return hundreds of species records. The table below summarises records of key protected species considered to be most sensitive to impact from proposed developments. Numerous additional notable species records were returned for the 2 km radius, which are considered unlikely to be impacted by the proposed development and are therefore not summarised below. For instance, species for which no suitable habitat is present close to the site (see end of table).

Table 3. Existing protected species records

	Local Ecological Records Centre			**EPS Licences granted**
Species	**Number of records within 2km**	**Closest record to site (km) and orientation****	**Most recent record**	**No. of EPS licences granted within 2km**
Adder *(Vipera berus*)	18	Location unknown Confidential	2019	N/A
Badger *(Meles meles*)	10	Location unknown Confidential	2021	N/A

	Local Ecological Records Centre			**EPS Licences granted**
Species	**Number of records within 2km**	**Closest record to site (km) and orientation****	**Most recent record**	**No. of EPS licences granted within 2km**
Bat species *(Chiroptera*)	87	0.22 W	2017	4
Common Lizard *(Zootoca vivipara*)	12	1.85 NW	2011	N/A
Grass Snake *(Natrix helvetica*)	15	1.62 NW	2021	N/A
Great Crested Newt *(Triturus cristatus*)	56	0.58 S	2020	2
Hedgehog *(Erinaceus europaeus*)	82	0.11 N	2021	N/A
Slow-worm *(Anguis fragilis*)	50	0.96 E	2020	N/A
No records were returned of the following key protected/notable species: Hazel Dormouse *(Muscardinus avellanarius*), Otter *(Lutra lutra*), White Clawed Crayfish *(Austropotamobius pallipes*)				
Records were returned of the following species amongst others but no suitable habitat is present close to the site: Water Vole *(Arvicola amphibius*)				

* Where the distance of records is further than the search radius, this is due to lack of accuracy in the record's coordinates. The true location of the record may be inside the search radius.

5.4 Records of bats given in the table above include records of 9 bat species, including the following: common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), Nathusius pipistrelle (*Pipistrellus nathusii*), unknown pipistrelle species (*Pipistrellus* sp.), brown long-eared (*Plecotus auritus*), unknown long-eared species (*Plecotus* sp.), noctule (*Nyctalus noctula*), Natterer's (*Myotis nattereri*), Daubenton's (*Myotis daubentonii*), and unknown myotis species (*Myotis* sp.).

5.5 Of the four EPS Licences granted for works affecting bats, there were x2 for the destruction of a common pipistrelle resting place (2 km NE, 07/08/2012 - 31/08/2013; 2 km SW, 28/06/2010 - 30/11/2010), x1 for the damage of a brown long-eared, common pipistrelle, and soprano pipistrelle resting place (0.2 km SE, 11/09/2014 - 01/10/2016), and x1 for the destruction of a common pipistrelle and soprano pipistrelle resting place (2 km SW, 08/10/2012 - 01/09/2015).

5.6 Of the two EPS Licences granted for works affecting great crested newts, both were for the destruction of a great crested newt resting place (1 km S, 13/02/2009 - 31/03/2009; 1.8 km NW, 26/04/2013 - 30/06/2015).

6 RESULTS OF HABITAT SURVEY

Habitats and Vegetation

6.1 A Phase 1 Habitat Plan can be found in Appendix A illustrating the habitats present. Photographs are included below.

Table 4. Habitats present within the site

Habitat type	Description	Dominant plant species	Overall biodiversity value*	Habitats of Principal Importance**	Additional Notes
Buildings	The site contained a single large building. The building had a pitched roof, hanging tiles, and a small flat roof extension. Block pavers were present to the north, east, and south of the building.	None	Low	No	Bat roost and nesting bird potential are assessed in Table 5, below.
Hard standing	Hard standing formed access to the east, and portions of the north and south of the site.	None	Negligible	No	
Introduced shrubs	Two patches of introduced shrub were present on site, both dominated by large buddleja bushes.	Buddleja *(Buddleja sp*.)	Low	No	The introduced shrub and resulting leaf litter on site may provide suitable habitat for invertebrates and hedgehogs.
Ephemeral/short perennial vegetation	Ephemeral/short perennial vegetation grew along the edges of the wooden fence within the western portion of the site.	Dandelion *(Taraxacum sp*.), Creeping Thistle *(Cirsium arvense*)	Low	No	The ephemeral/short perennial vegetation on site may provide limited opportunities to common invertebrates.
Bare ground	The western portion of the site consisted of a gravel car park.	None	Negligible	No	
Trees	The eastern area of the site contained a small number of scattered self-sown horse chestnut, ash and holly trees.	Horse Chestnut *(Aesculus hippocastanum*), Holly	Moderate	No	Individual trees can support a range of species, including mammals, birds, invertebrates, fungi, and mosses. Trees provide food,

Habitat type	Description	Dominant plant species	Overall biodiversity value*	Habitats of Principal Importance**	Additional Notes
		(Ilex aquifolium), Ash *(Fraxinus excelsior*)			shelter, commuting habitat, and breeding sites for wildlife.

*Overall biodiversity value of a habitat is guided by the criteria listed in section 4.6 of the Guidelines for Ecological Impact Assessment (CIEEM, 2018), which include habitats required by rare or uncommon animal or plant species, habitat connectivity and species-rich assemblages of plants.
** Habitats of principal importance included in Section 41 of the NERC Act.

Building 1 external: A large two storey office building with a pitched roof, hanging tiles, and a flat roof extension.

Hardstanding: Shown in the eastern portion of the site where the hardstanding formed an access driveway into and through the northern portion of the site. A strand of buddleja is shown in the centre frame.

Introduced shrubs: This habitat was present in small areas in the southern edge of the site. A large buddleja bush dominates the frame.

Bare ground and ephemeral/short perennial vegetation: A gravel parking area was present in the western portion of the site. Ephemeral/short perennial vegetation can be seen growing alongside the edge of the wooden fence in the right side of the frame.

Trees: Scattered trees were present within the areas of introduced shrub on site.

Protected/Notable Species Potential

6.2 The table below details the suitability of habitats within the site for key protected/notable species.

6.3 Species not detailed below are considered unlikely to be significantly impacted by the proposed works.

Table 5. Protected species potential

Species group	Strict Protection*	Species of Principal Importance**	General habitat requirements	Suitable habitat within site
Badger	Yes	No	Woodland, dense scrub, meadows, field edges.	No suitable habitats within the works area. No evidence of badgers was found during the survey, such as setts, footprints, latrines, feeding evidence, or hairs.
Bats	Yes	Yes - several species	Roost in buildings, tree cavities, bridges and caves.	Trees and buildings have been assessed for roosting bats. See report for details.
Birds (nesting)	Whilst Nesting	Various	Trees, shrubs, scrub, hedgerows, cavities within buildings, waterbodies, arable fields, bare/stony ground.	Introduced shrub and scattered trees provide low potential for nesting birds due to their sparse/juvenile nature. The building has potential to house nesting birds due to the large gaps present in the walls and roof which enable access into the soffit and potentially roof void.
Great crested newt	Yes	Yes	Breed in ponds and other waterbodies. Terrestrial habitat includes woodland and grassland.	There is no aquatic habitat within the site boundary. There was one pond 141 m east of the site which was dry, and another pond 254 m north-east of the site which was on private property and therefore inaccessible. Small areas of introduced shrub on site may provide sheltering sites and limited foraging opportunities for GCN, however these areas are heavily isolated within the site and not well connected to other areas of suitable habitat.
Hazel dormouse	Yes	Yes	Hedgerows, dense scrub, deciduous woodland with connected canopy and good ground flora.	No suitable habitats within the works area. The site is largely comprised of a building and bare ground. Where there are pockets of introduced shrub on site, they are isolated and sparsely vegetated.

Species group	Strict Protection*	Species of Principal Importance**	General habitat requirements	Suitable habitat within site
Hedgehog	No	Yes	Woodland, hedgerow, gardens, parks	Areas of introduced shrub may provide foraging and sheltering habitats for hedgehogs, however these areas are isolated within the site and not well connected to other areas of suitable habitat.
Invasive plant species	No	No	Species-dependent: Waste land, railway verges, riverbanks, waterbodies	Buddleja was identified growing sporadically around the site (see Target Notes, Appendices A & B).
Reptiles	Yes	Yes - all reptiles	Long grass, scattered scrub, hedgerows, rubble and log piles.	No suitable habitats within the works area.
Stag beetle	No	Yes	Woodland, hedgerow, orchard, parks	Introduced shrub and leaf litter within the understory provides suitable sheltering and foraging habitat.
Other invertebrates	No	Various	Species-dependent. High invertebrate diversity is favoured in sites with a mosaic of habitats and diverse plant assemblage.	Introduced shrub and leaf litter within the understory may provide suitable sheltering, foraging, hibernating, and breeding habitat for common invertebrates.
Otter	Yes	Yes	Rivers and lakes	No suitable habitats within the works area.
Water vole	Yes	Yes	Rivers, streams, wet ditches.	No suitable habitats within the works area.
White-clawed crayfish	Yes	Yes	Canals, streams, rivers, lakes, reservoirs and water-filled quarries	No suitable habitats within the works area.

7 RESULTS OF BAT SCOPING ASSESSMENT

Buildings

7.1 Building names and locations are shown on the Phase 1 Habitat Plan (Appendix A). In Appendix B, Target Notes have been used to identify features such as potential bat access points. Full details of the Bat Scoping Survey findings are contained in Appendix C, including building descriptions and inspection findings.

7.2 Roof voids are not the only area of a building that may be used by roosting bats. Bats often roost underneath roof tiles, hanging tiles, wooden cladding, inside cavity walls and amongst brickwork. In these locations, evidence of a bat roost may be concealed.

7.3 All areas where bats may roost in all buildings were accessed internally and externally.

7.4 The building was assessed as having **Low** potential for roosting bats, due to the presence of potential roost features including gaps in brickwork, hanging tiles, gaps behind soffit boxes, gaps under ridge tiles, and gaps under roof tiles.

Potential roosting feature: Gaps under roof tiles (Target Note 1).

Potential roosting feature: Gap behind soffit box (Target Note 2).

Potential roosting feature: Gaps under hanging tiles (Target Note 3).

Potential roosting feature: Gaps under ridge tiles (Target Note 4).

Bat access point: Gaps in fascia and brickwork (Target Note 5).

Trees

7.5 No suitable bat roosting features were visible within any trees within the site. As such all trees within the site boundary have been assessed as having **Negligible** bat roosting potential.

Foraging and commuting habitat

7.6 The site is considered to be of low value for commuting and foraging bats. Although the River Pinn and associated green corridor lie opposite the site on the other side of Joel Steet, the site itself does not offer features likely to be used regularly by bats for feeding, such as hedgerows or tree lines. Furthermore, the site is poorly connected to other optimal habitats in the wider landscape such as Ruislip Woods. Nevertheless, bats are present throughout all areas of the UK, and as such it is likely that commuting or foraging bats pass through the site occasionally.

8 RESULTS OF GCN HSI ASSESSMENT

8.1 Great crested newts breed within ponds but spend the majority of the year on land in habitats such as woodland, scrub and rough grassland. Newts may typically disperse up to 500 m from their breeding ponds. During the winter months, newts hibernate amongst habitats such as log piles, rubble and tree roots.

8.2 Two ponds were identified within 500 m of the proposed development using aerial photography, OS maps and ground-truthing. Full details of the Habitat Suitability Index (HSI) assessment for each pond are given in Appendix D.

8.3 Pond P1, located 141 m away from the site boundary, was accessed closely for assessment. Pond P2, located 254 m away from the site boundary, **could not be accessed** during the survey as it is located on private land for which access was not available.

8.4 Pond P1 was dry at the time of the HIS assessment. It is likely dry for most of the year as there was no water tolerant vegetation nearby at the time of the survey. An estimated assessment of P1 in optimal conditions has classified it as being of **average** suitability for great crested newts.

Pond 1 (P1): A dry woodland pond with no vegetation evident.

8.5 The habitat within the proposed development site is largely considered to be of low suitability for terrestrial great crested newts due to the lack of suitable foraging, breeding, or sheltering habitats. The site is comprised predominantly of building, bare ground, and hard standing, which are of negligible suitability for GCN. Habitats present on site which may offer some suitable sheltering habitats are limited to the two areas of introduced shrub in the southern portion of the site.

8.6 In addition to the site being broadly of low suitability for great crested newts, the site does not contain any habitat which would provide connections to any off-site ponds or suitable great crested newt habitat. GCN are unlikely to utilise or cross the site due to the numerous barriers to dispersal between the site and more optimal areas in the wider landscape. These include Joel Road ,which borders the site to the east and has dropped kerbs, and the housing estate and numerous associated residential roads with dropped kerbs which lies to the north, west, and south of the site.

9 CONCLUSIONS AND RECOMMENDATIONS

9.1 For any constraints identified, mitigation options should follow the Mitigation Hierarchy as set out in BS42020[8]. This seeks as a preference to avoid impacts then to mitigate unavoidable impacts, and, as a last resort, to compensate for unavoidable residual impacts that remain after avoidance and mitigation measures.

Overall Ecological Value

9.2 The proposed development site is considered to have broadly low ecological value due to the absence of notable areas of habitat, other than habitats found widely in the surrounding landscape, such as buildings, bare ground, hardstanding, and introduced shrub.

9.3 The proposed development is due to result in the loss of bare ground, building, ephemeral/short perennial vegetation, and hardstanding habitats. Introduced shrubs, scattered tree, and some hardstanding habitats are due to be retained within the development.

Designated Sites

Statutory Designated Sites

9.4 The proposed development site is located 0.3 km east of Ruislip Woods SSSI NNR, and 0.6 km north of Ruislip LNR. All other statutory sites are located over 2.8 km away.

9.5 The scale of the proposed works is such that there is unlikely to be a direct impact on these or any other statutory designated sites. The proposed development may lead to some level of increased recreational pressure on these sites, particularly when considered in combination with other developments in the local area. However, these sites are already managed as amenity resources for the use of the public. Therefore, the impact of any additional recreational users resulting from the development would be expected to be low.

Non-statutory Designated Sites

9.6 The closest non-statutory designated sites are River Pinn near Eastcote SINC located 10 m east of the site, Haydon Hall Meadows SINC located 0.24 km north-east of the site, and Ruislip Woods and Poor's Field SINC located 0.31 km west of the site. All other non-statutory sites are located over 4 km away.

9.7 The scale of the proposed works is such that there is unlikely to be a direct impact on these or any other non-statutory designated sites. The proposed development may lead to some level of increased recreational pressure on these sites, particularly when considered in combination with other developments in the local area. However, these

8 - British Standards Institution (2013). BS42020 – Biodiversity – Code of practice for planning and development.

sites (including the closest non-statutory site, River Pinn near Eastcote SINC) are already managed as amenity resources for the use of the public. Therefore, the impact of any additional recreational users resulting from the development would be expected to be low.

Habitats of Principal Importance

9.8 No habitats within or adjacent to the proposed development site are listed as Habitats of Principal Importance under Section 41 of the NERC Act[9].

Other Notable Habitats

9.9 The following habitats are not classed as Habitats of Principal Importance, but nevertheless are considered to be of notable biodiversity value in the context of the site and its surroundings:

Trees

9.10 The site includes a number of trees. All existing trees are due to be removed for the proposed development.

9.11 Recommendation: Trees should be replaced within the development site wherever possible, using native species found locally.

Protected Species

9.12 The following species are protected against harm/destruction/disturbance by European or UK Law for details see Appendix F.

Great Crested Newts

9.13 Great crested newts are legally protected from killing, injury, capture and deliberate disturbance. Habitats used by great crested newts are also protected (see Appendix F for details).

9.14 Great crested newts have previously been recorded as close as 0.58 km from the proposed development site. The landscape surrounding the site includes two waterbodies within 500 m of the proposed development site. The closest waterbodies are located 141 m east (pond P1) and 254 m north-east (waterbody P2). However, the habitats within the site offer poor quality habitat for great crested newts, with very little opportunity for hibernating or sheltering great crested newts. Additionally, ponds in the wider landscape are isolated from the proposed development site by areas of residential housing and residential roads with dropped kerbs.

9.15 Therefore, it is considered unlikely that the proposed development will impact great crested newt populations or individual great crested newts.

9 - Natural Environment and Rural Communities Act 2006.

9.16 As such, no further surveys or mitigation are recommended regarding great crested newts.

Reptiles

9.17 All species of native reptiles are legally protected against killing or injury (see Appendix F for details).

9.18 The habitats within the site are considered unsuitable for reptile species.

9.19 Therefore, it is considered unlikely that the proposed development will impact reptile populations or individual reptiles.

9.20 As such, no further surveys or mitigation are recommended regarding reptiles.

Roosting Bats - Buildings

9.21 All species of bat are legally protected from disturbance or harm and their roosts are protected from damage or destruction (see Appendix F for details).

9.22 The sole building on site (building B1) was assessed as having low potential for roosting bats, due to the presence of potential roost features including gaps in brickwork, hanging tiles, gaps behind soffit boxes, gaps under ridge tiles, and gaps under roof tiles.

9.23 The proposed development includes demolition of the building. Therefore, if the building is used by roosting bats, bat roost features would be destroyed and bats may be disturbed, injured or killed during demolition or dismantling works.

9.24 Recommendation: To ascertain whether the building is used by roosting bats, in accordance with BCT Survey Guidelines[10], it is recommended that the building is subject to a nocturnal emergence/re-entry survey (also known as dusk/dawn or presence/absence). The building should be surveyed on one occasion, to include one dawn or dusk survey. Five observation points in total will be required to cover the potential access points identified on the building. The survey should be undertaken between **May and August**.

9.25 If the surveys confirm the use of the building by roosting bats, additional emergence/re-entry surveys may be required (three total).

9.26 Any proposed development works likely to disturb bats or damage/destroy bat roosts may only be undertaken once a Natural England Mitigation Licence has been obtained. This would require a detailed bat mitigation strategy including the provision of alternative roosting features within the development site.

10 - Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London.

Roosting Bats - Trees

9.27 The trees within the site have all been assessed for their potential for roosting bats. All of the trees within the site were assessed as having negligible potential for roosting bats due to the absence of suitable features such as cracks, crevices or dense ivy growth.

9.28 As such, the proposed development is not expected to have any impact on potential bat roosts within trees.

9.29 As such, no further surveys or mitigation are recommended regarding roosting bats in trees. These trees can be removed or pruned if necessary without significant risk to roosting bats.

Foraging and Commuting Bats

9.30 Due to the habitats present within the site and the local landscape, it is considered likely that foraging or commuting bats use the site to a limited extent. Nevertheless, bats are likely to cross the area occasionally.

9.31 The foraging and commuting behaviour of bats is known to be altered by artificial lighting and bats may avoid illuminated areas[11].

9.32 Recommendation: To avoid a detrimental impact on bats using the site, there should be no increased light spillage on to suitable habitats, particularly on the periphery of the site, where bats are most likely to forage and commute. Lighting should be restricted to the interior of the site and should be kept to a low level. The following measures should be implemented within the lighting scheme:

- Minimise light spill through careful aiming, positioning and selection of luminaires and column heights.
- LED luminaires should be used where possible due to their sharp cut off, lower intensity and dimming capacity.
- Lighting must have no upward spill.
- Warm white luminaires with peak >550nm. UV lighting should be avoided.
- Reduce the light intensity to the minimum required for safety and security;
- Where security lamps are used these should use a trigger to illuminate them (e.g. infra-red detector), and switch off after a short period, rather than remaining on all night.
- Further guidance is available in Bats and artificial lighting in the UK[12].
- In some cases a Lighting Impact Assessment may be required to demonstrate that lighting will not have a detrimental impact on bats.

11 - Institution of Lighting Professionals (2018). Bats and artificial lighting in the UK. Guidance Note 08/18.
12 - Institution of Lighting Professionals (2018). Bats and artificial lighting in the UK. Guidance Note 08/18.

Dormice

9.33 Dormice are legally protected from disturbance or harm and their breeding sites and resting places are protected from damage or destruction (see Appendix F for details).

9.34 No records of dormice within 2 km of the site have been returned by record centres.

9.35 The habitats within the site are considered unsuitable for dormice.

9.36 Therefore, dormice are considered unlikely to be present within the site.

9.37 As such, no further surveys or mitigation are recommended with regards to dormice.

Water Vole and Otter

9.38 Otters and water voles are legally protected from harm, capture and disturbance and their breeding sites and resting places are fully protected (see Appendix F for details).

9.39 No habitat suitable for water voles or otters is present within or adjacent to the site.

9.40 Therefore, the proposed development is considered unlikely to impact these species.

9.41 As such, no further surveys or mitigation are recommended with regards to water vole or otter.

White-clawed Crayfish

9.42 White-clawed crayfish are legally protected from harm, capture and disturbance (see Appendix E for details).

9.43 No habitat suitable for white-clawed crayfish is present within or adjacent to the site.

9.44 Therefore, the proposed development is considered unlikely to impact this species.

9.45 As such, no further surveys or mitigation are recommended with regards to white-clawed crayfish.

Badger

9.46 Badgers are legally protected against killing, injury or disturbance and their setts are protected against interference (see Appendix F for details).

9.47 The habitats within the site are considered broadly unsuitable for badgers and no evidence of badgers was recorded during the survey.

9.48 Therefore, the proposed development is considered unlikely to impact badgers or their setts.

9.49 As such, no further surveys or mitigation are recommended with regards to badgers.

Invertebrates

9.50 Approximately 400 invertebrate species are listed as Species of Principle Importance' under Section 41 of the NERC Act (see Appendix F) and decision makers must have regard to the conservation of these species.

9.51 Although common invertebrates are likely to be found within the site, the habitats within the site are common and widespread, such as ornamental shrubbery and ephemeral/short perennial vegetation.

9.52 Therefore, it is considered unlikely that the proposed works will significantly impact important populations of invertebrates. The next section of this report includes measures to enhance the development for invertebrates.

Nesting Birds

9.53 All birds are protected against killing, injury or capture, and eggs and active nests are protected. Some bird species are also protected against disturbance (see Appendix F for details).

9.54 The site includes buildings, trees, and shrubbery which are suitable for nesting birds during the nesting season (typically March to August inclusive). Removal of suitable nesting habitats may result in the destruction of active bird nests, eggs or young.

9.55 Recommendation: To avoid destruction of active bird nests, it is recommended that building demolition and vegetation removal is only undertaken outside the bird nesting season. Building demolition and vegetation removal may only be undertaken during the nesting season if a careful check by a suitably experienced ecologist can confirm that no active bird nests are present. If bird nests are present within buildings or vegetation to be removed, they must be left in place and not disturbed until all the young have fledged and cease to return to the nest.

Other Species

Hedgehog

9.56 The site includes habitats suitable for hedgehogs to be present. Whilst not a strictly protected species, the hedgehog is listed as a Species of Principal Importance (see Appendix F) and decision makers must have regard to the conservation of their populations.

9.57 Recommendation: Where possible, boundary habitats such as hedgerows should be implemented instead of, or adjacent to, fences and walls. Boundary habitats are important resources to hedgehogs as they act as shelter and nest sites, and facilitate dispersal for foraging and mate finding.

9.58	Recommendation: If plans change and vegetation removal is required, care should be taken when removing scrub/shrub vegetation to avoid harm to hedgehogs which may be present. Once vegetation has been removed to a height of 150-300 mm, it should be checked by a member of site staff to ensure that no hedgehogs are present. If any hedgehogs are present, they may be moved to suitable habitat nearby. The next section of this report includes measures to enhance the development for hedgehogs.

Invasive Species

Invasive plant species

9.59 Buddleja was recorded throughout the site, and most notably within the introduced shrub in the southern portion of the site (see target notes, Appendix B).

9.60 Buddleja is not listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) as legally-controlled invasive plant species, but is known to be invasive in some circumstances (Natural England, 2011).

9.61	Recommendation: These plants are unlikely to cause problems in their current location within the site, but their spread should be avoided. If removal of these plants is required as part of the works, they should be disposed of responsibly (e.g. mulching, burning on site or removal to landfill) so that the plants cannot spread.

Invasive species: Small strands of buddleja were present throughout the site, pictured here growing out of the site of the wall at the east of the site (Target Note 7).

Invasive species: One of the two large buddleja trees present in the introduced shrub in the southern portion of the site (Target Note 9).

10 BIODIVERSITY ENHANCEMENT OPPORTUNITIES

10.1 In accordance with the NPPF[13], recommended opportunities for biodiversity enhancement (above and beyond those required to mitigate for the identified impacts) are set out below. Any additional measures pending the results of the recommended bat survey should be incorporated as necessary. The below recommendations may not all be feasible within the final development and alternative enhancements should also be considered. A detailed Ecological Mitigation and Enhancement scheme may be appropriate to confirm the details and locations of enhancements which are due to be included within the development.

Wildlife Boxes

Bird boxes (general)

10.2 Installation of bird boxes increases nesting opportunities for bird species. A variety of bird box designs are available, for installation on existing mature trees, on external building walls, or to be in-built into the structure of new buildings. Bird boxes should be installed at least 2 m in height facing north and east, thus avoiding strong sunlight and wet winds.

Swallow Nest Boxes

10.3 Providing nest bowls or boxes for swallows can increase the resilience of their populations during dry periods as they are still able to nest when no mud is available. Swallow nests boxes or bowls should be situated inside or outside a building with constant access for the birds. They can be placed in enclosed areas of buildings such as porches or outbuildings. Multiple bowls or boxes can be placed on the same building but should be at least 1 m apart. A minimum of 6 cm should be left above the nest cup.

Swift Nest Boxes

10.4 Swifts (*Apus apus*) are an iconic urban bird species typically using buildings as nesting places. This species is listed as a Red List Species of conservation concern in the UK due to population declines. The inclusion of swift boxes will provide a new potential nesting site for this species. In this case the recommended model is an **Ibstock Eco-habitat for Swifts** (or similar), to be installed into the fabric of the new buildings. As swifts nest colonially, groups of four to ten nest boxes should be installed on suitable buildings. The swift boxes will be installed at the highest possible level, to provide sufficient height for swifts to access the box, with a clear flight path to the entrance and out of prevailing winds and strong sunlight.

13 - Ministry of Housing, Communities and Local Government (2021). National Planning Policy Framework.

House Sparrow Nest Boxes

10.5 The house sparrow (*Passer domesticus*) is an iconic species whose populations have faced steep declines in recent decades. Sparrow terraces' are available which can accommodate multiple nests and are designed to be incorporated into the fabric of a building as it is built. Boxes should ideally be installed between 2 and 5 m above ground, preferably avoiding areas that are exposed to strong sunlight or prevailing winds. Siting boxes close to vegetation is helpful for young birds taking their first flights.

Bat Boxes

10.6 The inclusion of bat boxes provides new roost sites for bats within the local area. A variety of bat box designs are available, for installation on existing mature trees, on external building walls, or to be in-built into the structure of new buildings. Bat boxes should be located in sheltered spots away from artificial lighting and placed at a height of at least 3 metres from the ground, ideally facing south.

Hedgehog Boxes/Corridors

10.7 To enhance the site for hedgehogs, it is recommended that hedgehog nest boxes/domes are installed in undisturbed locations within the site.

10.8 To allow hedgehogs to pass through the site, it is recommended that all garden fences include a gap of at least 13 cm x 13 cm at ground level.

Invertebrate Boxes

10.9 A wide variety of invertebrate boxes/bug houses are available for installation on trees or poles, to provide nesting and sheltering opportunities for solitary bees, lacewings and various other insects. Boxes should ideally be placed in sunny locations that are protected from wind and rain. Examples of good locations include walls, pergolas, gardens and balconies up to the third or fourth floor. Installing invertebrate boxes close to fruit trees can improve pollination of the trees.

Vegetation and Planting

Tree and Shrub Planting

10.10 The Local Plan Policy DMHB 14 states that 'where trees are to be removed, proposals for replanting of new trees on-site must be provided or include contributions to offsite provision'.

10.11 Wherever possible, additional tree and shrub planting is recommended within the site which will increase feeding resources and connectivity for wildlife including bats, birds and invertebrates. Connected corridors of shrubbery within the site will have a larger impact than isolated patches.

10.12 Shrub planting should include a variety of species found on the Royal Horticultural Society's Plants for Pollinators' lists, such as lavender (*Lavandula* species), heather (*Calluna vulgaris*), common box (*Buxus sempervirens*), common hawthorn (*Crataegus monogyna*), bell heather (*Erica cinerea*), blackthorn (*Prunus spinosa*), knapweeds (*Centaurea* species), guelder rose (*Viburnum opulus*), barberry (*Berberis species*) and honeysuckle (*Lonicera peridymenum*).

10.13 Native tree species such as hazel (*Corylus avellana*), rowan (*Sorbus aucuparia*), crab apple (*Malus sylvestris* sens.str), elder (*Sambucus nigra*), field maple (*Acer campestre*), holly (*Ilex aquifolium*) and English oak (*Quercus robur*) can be used to provide known benefit to wildlife.

Grassland Planting

10.14 Wherever possible, areas of informal meadow' grassland should be included, seeded with a species-rich wildflower grassland mix to provide foraging opportunities, particularly for pollinating invertebrates. Areas of longer informal grassland also offer shelter for reptiles, amphibians and small mammals. Recommended grassland species are included in the RHS 'Plants for Pollinators' lists[14].

10.15 To encourage butterflies and bumblebees, the grassland can be designed to incorporate a mosaic of habitats including patches of bare ground, short open turf, tall grass, tussocks and plants in all stages of development. A varied topography which incorporates south facing slopes and sheltered areas is also recommended.

10.16 Grassland managed for invertebrates should be cut only once or twice per year, always allowing plants to set seed in the summer before cutting. If possible, some areas should remain uncut each year.

Wildlife Corridors

10.17 The site would be enhanced by the creation of corridors of habitat including hedgerows and tree lines, to assist wildlife to cross the site. These corridors should not be subject to intense artificial lighting, to encourage bats and other nocturnal species. To allow hedgehogs and other wildlife to pass through the site, it is recommended that all garden fences include a gap of at least 13 cm x 13 cm at ground level.

Additional Habitat Features

Pond

10.18 If feasible, a new pond may be included in the proposed development. Ponds create a significant habitat enhancement for a wide range of wildlife including plants, invertebrates, amphibians, reptiles, bats and birds. Ponds also help with flood water retention.

14 - Royal Horticultural Society (no date). Plants for Pollinators – Garden Plants. rhs.org.uk/plantsforpollinators

10.19 All ponds can be utilised by wildlife but to have the maximum benefit they should have a minimum area of 4 - 5 square metres and have clean, fresh water flowing through them. Ponds should include at least one shallow-sloped bank, as this will allow newts and other species easy access in and out of the water. Incorporating a range of depths into the pond will provide appropriate positions for different plants and incorporating an area with a minimum depth of 80 cm will prevent all of the pond freezing during cold weather allowing refuge for species such as newts. Native plants such as hornwort (*Ceratophyllum demersum*), frogbit (*Hydrocharis morsus-ranae*) and bogbean (*Menyanthes trifoliata*) will improve the pond for the use of wildlife, although many pond plants arrive naturally with no planting.

10.20 If possible, incorporating a marsh or shallow wetland area will increase its value for wildlife. Additionally, habitat enhancements such as submerged and emergent plants, floating and rooted plants, piles of dead wood, earth and rocks, islands and peninsulas, bare mud and thick vegetation, scrub, green plants and trees will improve its value for a range of species.

Log or Stone Piles

10.21 To enhance the site for invertebrates such as the stag beetle (*Lucanus cervus*), reptiles and amphibians, it is recommended that log piles, 2 m width/length and 1 m in height, are created in shaded and undisturbed locations, within the site.

10.22 Alternatively, piles of rocks in both sunny and shaded areas of the site can provide enhancement for a variety of species.

Biodiverse Green Roof

10.23 Policy DMEI 1 in the Local Plan states that 'All major development (residential development of 10 dwellings or more; any building with a floor space of 1000 square metres or more; development on a site of 1 hectare or more) should incorporate living roofs and/or walls into the development. Suitable justification should be provided where living walls and roofs cannot be provided'.

10.24 Wherever feasible, a biodiverse green roof makes a significant enhancement to the biodiversity value of a site and the local area without occupying additional land space. Green roofs can be designed to recreate grassland, brownfield or wasteland habitats critical for many rare species, including bird species and invertebrates. Crushed aggregate can be used to provide green roof substrate. Variable substrate grade and depth is encouraged. The green roof should be designed following the principles of Buglife's Green Roof Guide[15] wherever feasible. A range of native plant species can be plug planted on the roof, as recommended by Buglife to provide a ready resource for invertebrates, particularly during the first few years whilst naturally colonised plants become fully established. A locally-sourced log pile can be installed on the green roof, to provide shelter and nesting sites for invertebrates that burrow into or shelter amongst dead wood. Green roofs also have many additional benefits in terms of building insulation, drainage and roof lifespan.

15 - Gedge, D., Grant, G., Kadas, G & Dinham, C. (undated). Creating Green Roofs for Invertebrates - A Best Practice Guide. Buglife, Peterborough.

11 APPENDICES CONTENTS

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- 220666-EC-01 Habitat plan

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- 220666-EC-02 Target Note Schedule

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- 220666-EC-03 Building Assessment

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APPENDIX E

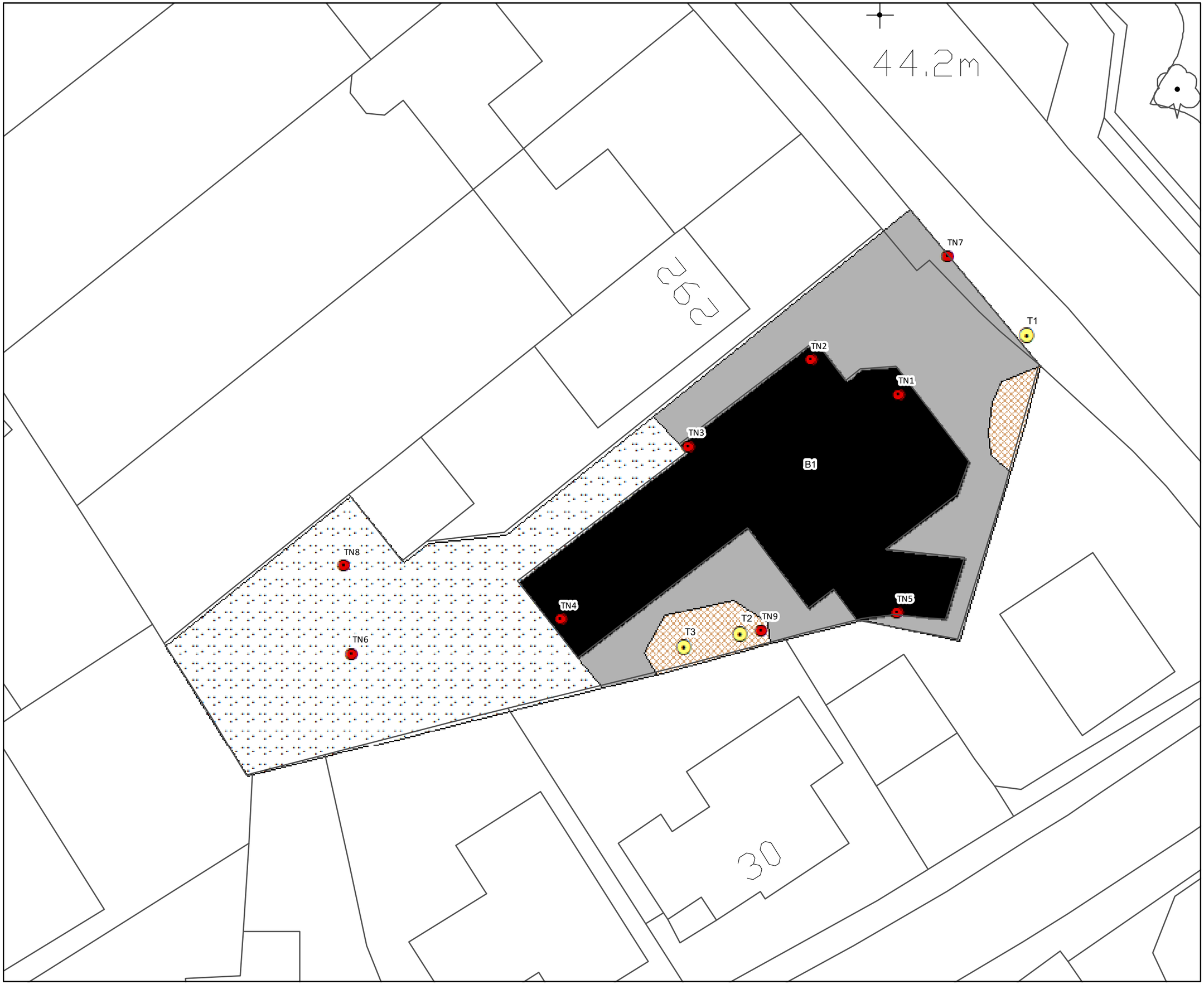
- 220666-EC-05 Pond Assessment

APPENDIX F

- Wildlife Legislation

APPENDIX A

- 220666-EC-01 Habitat plan



N
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Legend

- Target Note
- Building
- Introduced shrub
- Hard standing
- Bare ground

Tree Bat Potential

- C (Confirmed Roost)
- H (High)
- M (Moderate)
- L (Low)
- N (Negligible)
- Not assessed

Drawing title:
Habitat Plan

Project Name:
Haydon House

Metres
0 2.5 5 7.5 10

Drawing No	Date
220666-EC-01	31/08/2022

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APPENDIX B

- 220666-EC-02 Target Note Schedule

Target Note Schedule

Target notes

Object ID	Type	Notes and findings
1	Bat access point	Raised tile.
2	Bat access point	Gaps in hanging tiles and soffit.
3	Bat access point	Gaps on corner hanging tiles.
4	Bat access point	Missing ridge tile.
5	Bat access point	Gap in facia and in brickwork near piping on flat roof extension.
6	Habitat description	Gravel parking area.
7	Invasive plant species	Buddleja.
8	Invasive plant species	Buddleja.
9	Invasive plant species	Buddleja.

APPENDIX C

- 220666-EC-03 Building Assessment

Bat Building Assessment Summary

TIM MOYA ASSOCIATES

220666 - Haydon House

220666ED-11

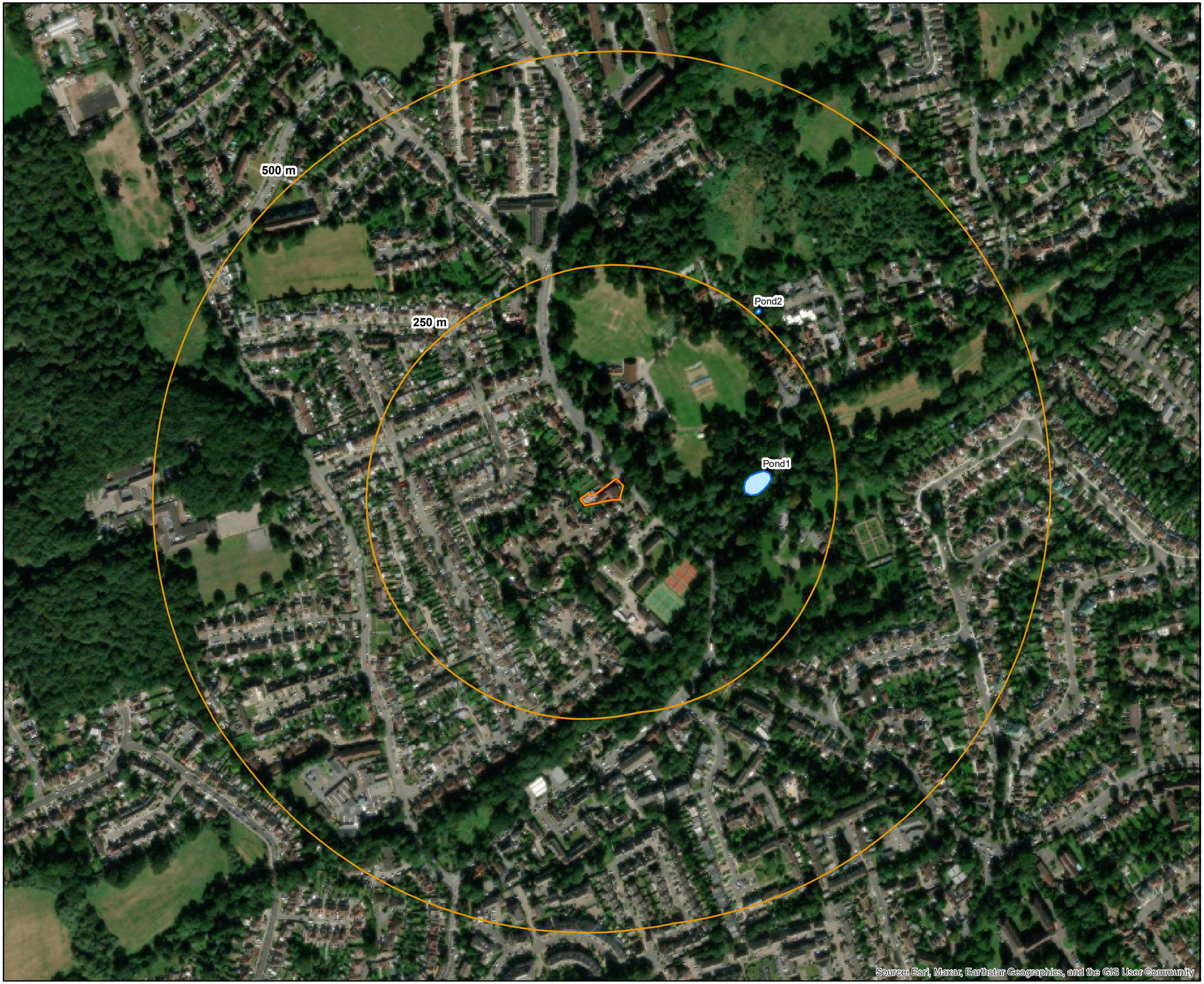
Object ID REF	Storeys	Use of Building	Roof type Condition	Materials	Cellars	Chimneys	Roof void present	Bats evidence	Bat roost potential	Hibernation pot.	Internal Inspection	Potential bat access points Potential bat roost features	Ecological notes	Recommendations
1 Office building	2	Office	Pitched Good	Roof external: Concrete tiles, plastic soffit, plastic and wooden fascia, felt Roof internal: Unknown Wall: Brick	N	0	Y	N	L	N	No	Eaves - gaps behind soffit boxes. Roof materials - gaps in brickwork. Tiles - gaps between. Tiles - missing Brickwork - gaps in brickwork. Cladding - hanging tiles. Eaves - gaps behind soffit boxes. Roof void. Tiles - gaps under ridge tiles. Tiles - gaps under roof tiles	Externally within the south-east portion of the building, there were raised tiles, a missing ridge tile, and hanging tiles with small gaps suitable for low numbers of bats. There were also gaps in the plastic soffit and small gaps in the brickwork near the pipework on the section of flat roof.	- Emergence / return surveys (May to August), if bat roost features are due to be impacted- Single emergence survey recommended.

Bat roost and Hibernation potential

C - Confirmed H - High M - Moderate L - Low N - Negligible

APPENDIX D

- 220666-EC-04 Pond Plan



N
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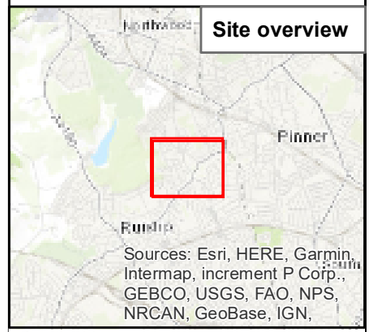
Legend

Site Boundary

Water Body



Drawing title:
Pond Plan

Project Name:
Haydon House

Metres
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Drawing No	Date
220666-EC-04	31/08/2022

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APPENDIX E

- 220666-EC-05 Pond Assessment

Great Crested Newt Habitat Suitability Index Report

TIM MOYA ASSOCIATES

Ponds

(ID) Name/ description	Field Location	Pond area (m2)	Pond drying*	Water Quality*	Shade (% of bank)	Fowl	Fish	Pond in 1km2	Terrestrial Habitat	Macrophytes %	Grid Reference	*Distance from Site (m)	**HSI Score**	**Pond Suitability**
(1) Dry woodland pond with no vegetation evident.	Optimal	618.00	Annually	Good	80	Absent	Absent	2	Moderate	0	TQ1065688842	141	**0.63**	**Average**
(2) Residential waterbody - inaccessible.		22.38									TQ1065689043	254		

*Factor estimated based on observations at time of survey and any other information available

Generated By MyTREES tree management software

APPENDIX F

- Wildlife Legislation

Statutes and English Law

Reptiles

All species of native reptiles are protected against killing or injury under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). The sand lizard (*Lacerta agilis*) and smooth snake (*Coronella austriaca*) are further protected under The Conservation of Habitats and Species Regulations 2017 and The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 against capture or disturbance and the places they use for breeding, resting, shelter and protection are protected from being damaged or destroyed.

Great Crested Newts

The great crested newt and its habitat are protected under the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017 and The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. This legislation makes it an offence to deliberately kill, injure or capture a great crested newt; deliberately disturb a great crested newt; damage, destroy or obstruct access to a structure used for shelter or protection by a great crested newt; or possess or transport a great crested newt.

Bats

All species of bat and their breeding sites or resting places (roosts) are protected under Regulation 41 of The Conservation of Habitats and Species Regulations 2017 and The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and Section 9 of the Wildlife and Countryside Act 1981. It is an offence for anyone intentionally to kill, injure or handle a bat, to possess a bat (whether live or dead), disturb a roosting bat, or sell or offer a bat for sale without a licence. It is also an offence to damage, destroy or obstruct access to any place used by bats for shelter, whether they are present or not.

Badgers

Badgers and their setts are protected under the Protection of Badgers Act 1992 which makes it an offence to kill, injure or possess a badger; interfere with, damage or destroy a badger sett including obstructing access to a badger sett; cruelly treat or harm a badger; or disturb a badger in a sett.

Otters

Otters and their resting places are protected under the Wildlife and Countryside Act 1981 (as amended) and the The Conservation of Habitats and Species Regulations 2017 and The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. This legislation makes it an offence to deliberately kill, injure or capture an otter; deliberately disturb an otter in their breeding or resting places; damage, destroy or obstruct access to their resting or breeding places.

Water Voles

Water voles are protected under the Wildlife and Countryside Act 1981 (as amended) from killing or taking by certain prohibited methods. Their breeding and resting places are fully protected from damage, destruction or obstruction; it is also an offence to disturb them in these places.

Dormice

Hazel dormice are protected under both The Conservation of Habitats and Species Regulations 2017 and The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and the Wildlife and Countryside Act 1981 (as amended). Dormice and their breeding sites and resting places are fully protected. Without a licence it is an offence for anyone to deliberately disturb, capture, injure or kill them. It is also an offence to damage or destroy their breeding or resting places, to disturb or obstruct access to any place used by them for shelter. It is also an offence to possess or sell a wild dormouse.

Birds

All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended), which makes it an offence to kill, injure or take wild birds; take, damage or destroy the nest of wild birds while it is in use or being built; or take or destroy the eggs of wild birds.
Certain bird species are listed on Schedule 1 of The Wildlife and Countryside Act 1981 (as amended). Under this legislation they are afforded the same protection as all wild birds and are also protected against **disturbance** whilst building a nest, or on or near a nest containing eggs and or unfledged young.

White-clawed crayfish

White-clawed crayfish are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) protecting them from harm, disturbance and capture without an appropriate licence. It is illegal to buy or sell white-clawed crayfish whether alive or dead.

Invertebrates

Three UK invertebrate species are protected under The Conservation of Habitats and Species Regulations 2017 and The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 – large blue butterfly, fisher's estuarine moth, little ramshorn whirlpool snail. It is an offence for anyone to deliberately disturb, capture, injure or kill them. It is also an offence to damage or destroy their breeding or resting places, to disturb or obstruct access to any place used by them for shelter. It is also an offence to possess, or sell these species.
Approximately 400 further invertebrate species are listed as 'Species of Principle Importance under Section 41 of the NERC Act (see below).

Invasive Plant Species

It is prohibited to plant or otherwise cause to grow in the wild any species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). The Environmental Protection Act 1990 also classifies certain invasive plants as controlled waste which must be disposed of safely at an appropriately licensed landfill site (e.g. Japanese knotweed).
Under section 57 of the Anti-social Behaviour, Crime and Policing Act 2014, if an individual or an organisation fails to control an invasive plant species which is having a detrimental effect on the quality of life of those in the locality. A notice can be issued after a mandatory written warning has been served. Breach of this notice, without reasonable excuse, would be a criminal offence, subject to fixed penalty notice (a penalty of £100) or prosecution. On summary conviction an individual could be liable to a level 4 fine and an organisation (e.g. a company) could be liable to a fine not exceeding £20,000.

Planning Policy

In addition to the statutes described above, various planning policy imposes duties upon planning applicants to take account of protected species and habitats at sites of proposed development and in particular, protected species. The objective of this policy is to prevent a net loss of species and habitats diversity identified as priorities for the U.K. as a consequence of development activity.

National Planning Policy Framework (NPPF)

The National Planning Policy Framework is clear that pursuing sustainable development includes moving from a net loss of biodiversity to achieving net gains for nature, and that a core principle for planning is that it should contribute to conserving and enhancing the natural environment and reducing pollution.
Planning policies should promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations. If significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused.

Natural Environment and Rural Communities Act (NERC Act)

Section 40 of the Natural Environment and Rural Communities Act 2006 places a duty on all public authorities in England and Wales to have regard, in the exercise of their functions, to the purpose of conserving biodiversity.

Priority Habitats and Species

Priority habitats and species are defined (NPPF, 2018) as 'Species and Habitats of Principle Importance included in the England Biodiversity List published by the Secretary of State under Section 41 (S41) of the Natural Environment and Rural Communities Act 2006 (NERC Act)'. The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under the NERC Act, to have regard to the conservation of biodiversity in England, when carrying out their normal functions.

Fifty-six **habitats** of principal importance are included on the S41 list. These are all the habitats in England that were identified as requiring action in the UK Biodiversity Action Plan (UK BAP) and continue to be regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework. They include terrestrial habitats such as upland hay meadows to lowland mixed deciduous woodland, and freshwater and marine habitats such as ponds and subtidal sands and gravels.

There are 943 **species** of principal importance included on the S41 list. These are the species found in England which were identified as requiring action and which continue to be regarded as conservation priorities under the UK Post-2010 Biodiversity Framework. In addition, the Hen Harrier has also been included on the list because without continued conservation action it is unlikely that the Hen Harrier population will increase from its current very low levels in England.

ODPM Circular 06/2005

This Government Circular entitled 'Biodiversity and Geological conservation – Statutory obligations and their impact within the planning system' (ODPM, 2005) provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England.

The potential effects of a development, on habitats or species listed as priorities under Section 41 of the NERC Act, and by Local Biodiversity Partnerships, together with policies in the England Biodiversity Strategy, are capable of being a material consideration in the preparation of regional spatial strategies and local development documents and the making of planning decisions.

The presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat. It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision. The need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances, with the result that the surveys are carried out after planning permission has been granted. However, bearing in mind the delay and cost that may be involved, developers should not be required to undertake surveys for protected species unless there is a reasonable likelihood of the species being present and affected by the development. Where this is the case, the survey should be completed and any necessary measures to protect the species should be in place, through conditions and/or planning obligations, before the permission is granted.

Statutory and Non-Statutory Sites

Name	Statutory/Non-statutory	Definition
SAC – Special Area of Conservation	Statutory	Strictly protected sites designated under the EC Habitats Directive, that will make a significant contribution to conserving habitats or species identified in Annexe I and II of the Directive (as amended).
SPA – Special Protection Area	Statutory	Strictly protected sites classified in accordance with Article 4 of the EC Birds Directive. They are classified for rare and vulnerable birds (as listed on Annex I of the Directive).
SSSI – Site of Special Scientific Interest	Statutory	SSSIs provide statutory protection for the best examples of the UK's flora, fauna, or geological or physiographical features.
NNR – National Nature Reserve	Statutory	NNRs contain examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats or to provide opportunities for scientific study.
LNR – Local Nature Reserve	Statutory	LNRs are declared and managed for nature conservation, and provide opportunities for research and education, or simply enjoying and having contact with nature.
Ramsar – Ramsar Site	Statutory	Ramsar sites are wetlands of international importance designated under the Ramsar Convention.
LWS – Local Wildlife Site	Non-statutory	Areas of land with significant wildlife value for the local area.
SINC – Site of Importance for Nature Conservation	Non-statutory	Areas of land with significant wildlife value for the local area.
CWS – County Wildlife Site	Non-statutory	Areas of land with significant wildlife value for the county.

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