38-42 Vincam Close, Twickenham

Preliminary Ecological Appraisal and Bat Roost Assessment

Produced for NFC Homes Limited

By Applied Ecology Ltd

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1 Introduction

Background

1.1 In May 2021, Applied Ecology Ltd (AEL) was commissioned by NFC Homes Ltd to carry out a Preliminary Ecological Appraisal (PEA) and Preliminary Bat Roost Assessment (PBRA) of three existing dwelling houses with an address of 38-42 Vincam Close, Twickenham, TW2 7AB ("the Site").

1.2 The location of the Site, which has an approximate central grid reference of TQ13368 73828, is shown in **Figure 1.1**.

1.3 The appraisal was required to determine the likely ecological constraints associated with a proposal for the demolition of the existing buildings and construction of new residential development (hereafter referred to as "the Development) – the details of which were unseen at the time of writing this report.

1.4 Where possible, the report discusses, at a high level, the likely impacts of the development on ecology and is based only on a broad understanding of the intended development. However, it does not provide, and nor is it intended to provide, a detailed or comprehensive assessment of development impacts in the form of an Ecological Impact Assessment (EcIA), and such an assessment cannot be considered until full details of the development are known.

Legislation and Planning Policy

Legislation

1.5 The Wildlife and Countryside Act 1981 (as amended) provides the main legal framework for nature conservation and species protection in the UK. The Site of Special Scientific Interest (SSSI) is the main statutory nature conservation designation for sites in the UK. Such sites are notable for their plants, animals, or habitats, their geology or landforms, or a combination of any of these features. Natural England is the key statutory agency in England for advising Government, and for acting as the Government's agent in the delivery of statutory nature conservation designations.

1.6 Designation of a SSSI is a legal process, by which sites are notified under the Wildlife and Countryside Act 1981. The 1981 Act makes provision for the protection of sites from the effects of changes in land management, and owners and occupiers receive formal notification specifying why the land is of special scientific interest, and listing any operations likely to damage the special interest.

1.7 Species protection in the UK is provided by the Wildlife and Countryside Act 1981 (as amended), with some species receiving additional European-wide protection from the Conservation of Habitats and Species Regulations 2017 (commonly referred to as 'European Protected Species'). Some examples, but not an exhaustive list, of the species and form of protection offered by these legislations follow below.

1.8 A wide variety of species such as: reptiles, birds, bats, hazel dormice *Muscardinus avellanarius* and great crested newts *Triturus cristatus* (GCN) are protected from killing, injuring and capture. The nests of birds are additionally protected from damage and destruction and, for those listed on schedule 1 of the Wildlife and Countryside Act 1981, from deliberate or reckless disturbance.

1.9 The habitats of European protected species are additionally protected. For example, bat roosting sites are protected from either deliberate or reckless damage, destruction or obstruction (even if a bat is not present) and places used for shelter and protection by GCN are similarly protected from destruction, damage or obstruction.

1.10 Specific protection for badgers *Meles meles* is provided by the Protection of Badgers Act 1992. This Act protects badgers from being taken, injured or killed. Furthermore, badger setts are protected from interference, making it an offence to damage, destruct or obstruct access to a sett as well as to disturb a badger whilst it occupies a sett.

1.11 The Countryside and Rights of Way Act 2000, and The Natural Environment and Rural Communities (NERC) Act 2006, provide supplementary protected species legislation.

Bat Legislation

Wildlife & Countryside Act

1.12 The Wildlife and Countryside Act 1981 (as amended) provides the main legal framework for nature conservation and species protection in the UK. All UK native species of bat are listed in Schedule 5 of the WCA. The legislation protects bats and their roosts under Section 9 of the Act, such that it is an offence to:

- Intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection;
- Intentionally or recklessly obstruct access to any structure or place which a bat uses for shelter or protection;
- Sell or advertise for sale any live or dead bat or any part of, or anything derived from a bat.

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

1.13 The Regulations provide legal protection for European Protected Species (those listed under Annex IV of the EU Habitats Directive (Council Directive 92/43/EEC)). With regards to all British bats, this makes it an offence to:

- Deliberately (or recklessly in Scotland) capture, injure or kill a bat;
- Deliberately (or recklessly in Scotland) disturb a bat in a way that would (significantly in Scotland) affect its ability to survive, breed or rear young (or hibernate or migrate in England, Wales and Northern Ireland) or (significantly in England, Wales and Scotland) affect the local distribution or abundance of the species.
- Damage or destroy a roost [this is an 'absolute' offence and need not be deliberate or intentional].
- Possess, control, transport, sell, exchange or offer for sale/exchange and live or dead bat or any part of a bat.

1.14 Licences to permit illegal activities relating to bats and their roost sites can be issued for specific purposes and by specific licensing authorities in each EU country under the auspices of the of Conservation of Habitats and Species Regulations. These are sometimes called 'derogation licences' or 'European Protected Species Mitigation' (EPSM) licences, and in England, are issued by Natural England.

Habitats and Species of Principal Importance in England

1.15 The Natural Environment and Rural Communities (NERC) Act came into force on 1 October 2006. Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The list has been drawn up in consultation with Natural England, as required by the Act.

1.16 The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of the Natural Environment and Rural Communities Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions.

Habitats of Principal Importance

1.17 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 sub-tidal sands and gravels.

Species of Principal Importance

1.18 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 under the UK BAP and which continue to be regarded as conservation priorities under the UK Post-2010 Biodiversity Framework. In addition, the hen harrier *Circus cyaneus* 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.

1.19 In accordance with Section 41(4) the Secretary of State will, in consultation with Natural England, keep this list under review and will publish a revised list if necessary.

National Planning Policy Framework

1.20 The National Planning Policy Framework (NPPF) was published in March 2012 (and replaced previous planning policy guidance (PPS 9) on biodiversity. The NPPF was updated in July 2018, February 2019, and in July 2021, and states the following in relation to biodiversity and planning:

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

- *if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately*

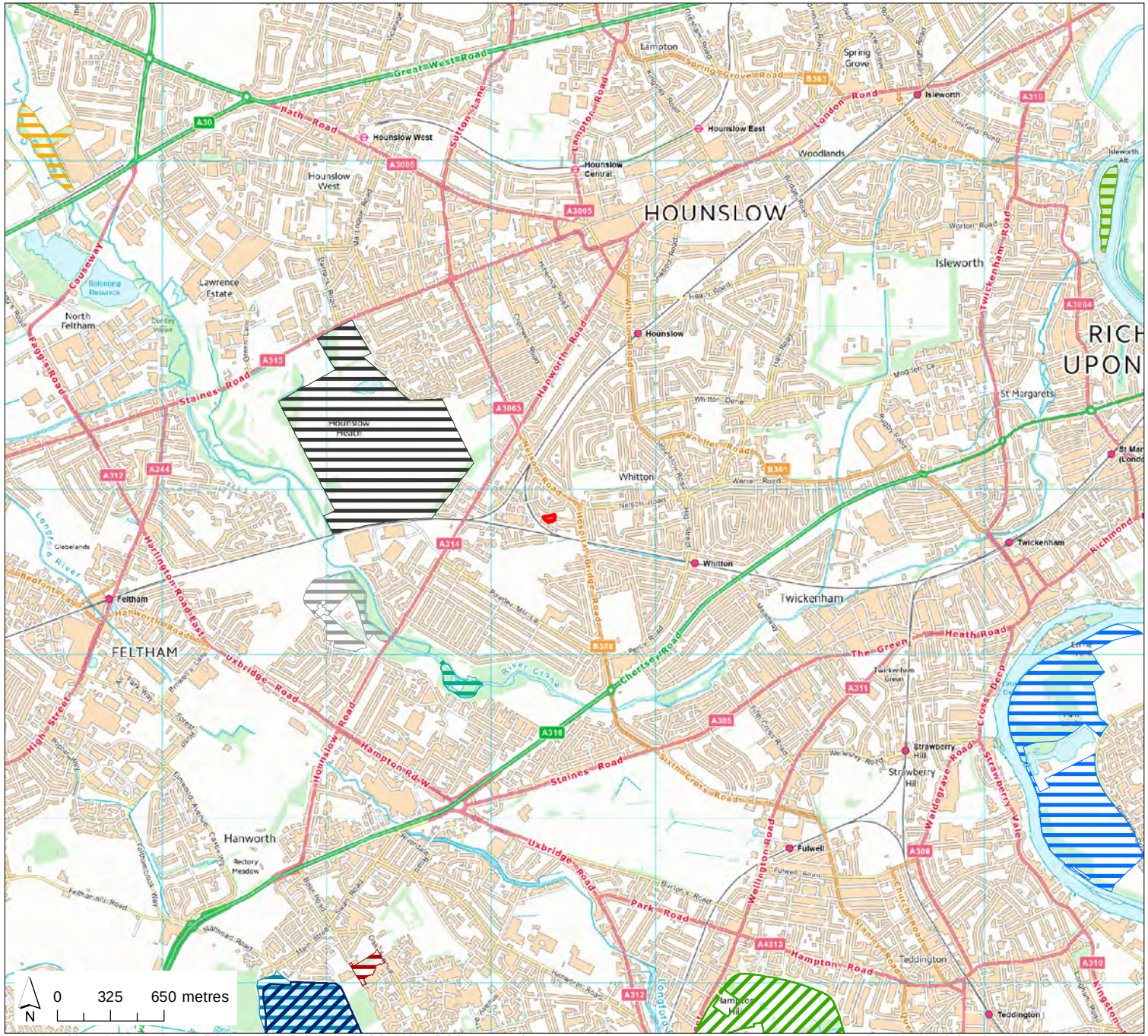
mitigated, or, as a last resort, compensated for, then planning permission should be refused;

- *development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- *development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and*
- *development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.*

The following should be given the same protection as habitats sites:

- *potential Special Protection Areas and possible Special Areas of Conservation;*
- *listed or proposed Ramsar sites; and*
- *sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.*

The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site."



Vincam Close, Richmond

Site location

- Site boundary
- Bushy Park and Home Park SSSI
- Kempton Park Reservoirs SSSI
- Crane Park Island LNR
- Cranebank LNR
- Ham Lands LNR
- Hounslow Heath LNR
- Isleworth Ait LNR
- Kempton Nature Reserves LNR
- Oak Avenue Hampton LNR
- Pevensey Road LNR

Figure 1.1

Map Scale @ A4: 1:35,000

Surveyed by: n/a	
Survey date: n/a	
Drawn by: RD	
Checked by: DP	
Status: Final	

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2 Methodology

Habitats

2.1 An extended Phase 1 habitat survey was undertaken for the Site on 18 May 2021 by AEL ecologist Dr Duncan Painter CEnv MCIEEM[1] in bright weather conditions. The methodology adopted followed the standard JNCC approach to Phase 1 habitat survey (JNCC, 1993[2]) by which all habitats present within the site were classified and mapped according to standard categories. Habitat patches were mapped as polygon features, and if sufficient space on the map linear features (such as walls and fences) as lines where this provided added value. Point features were recorded where there were notable isolated trees or scrub. Plant species abundance was noted using the DAFOR[3] system.

2.2 The habitat map was subsequently digitised using a Geographical Information System (ArcGIS).

2.3 The survey was completed within the accepted season for completing Phase 1 habitat survey (which runs from late March until mid-October in southern England).

Fauna

2.4 Searches for evidence of faunal species within the Site was completed as part of the extended Phase 1 survey. With the exception of roosting bats (described below), this was not an exhaustive search but comprised noting incidental wildlife sightings, field signs and included a professional judgement assessment of habitat suitability for faunal species.

Bats

Preliminary Bat Roost Assessment

2.5 A preliminary bat roost assessment (PBRA) of the existing on-Site buildings (38-42 Vincam Close) was completed by Duncan Painter on 18 May 2021 in line with Collins (2016)[4] to assess their use or potential for use by roosting bats. DP is a professional ecologist and bat surveyor with extensive bat field survey and mitigation planning experience in relation to bats and development across the UK.

2.1 The dwellings were subject to a systematic external inspection using binoculars and a high powered cree torch as necessary. Evidence of bats searched for included live bats, bat

[1] Holds three separate licences pertaining to bat survey: WML-CL18; WML-CL21; and WML-CL32 and has been a registered bat roost volunteer visitor for Natural England (WML-CL15). Holds a class licences in relation to badger (WML-CL35) and great crested newt (WML-CL09 & WML-CL33), hazel dormice (WML-CL10A), and native crayfish (WML-CL11).

[2] JNCC (1993) *Handbook for Phase 1 Habitat Survey – A technique for Environmental Audit*. JNCC, Peterborough.

[3] DAFOR: whereby species occurrence may be classified as being **d**ominant, **a**bundant, **f**requent, **o**ccasional or **r**are. Rare in the context of a DAFOR score should not be confused with species rarity in the more widely accepted meaning of general scarcity.

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

droppings on walls and other exposed surfaces, staining (caused by bat fur oils and/or urine spots).

2.2 The inspection of buildings to assess their roosting use/suitability for bats can be conducted at any time of year, according to the best practice survey guidance (Collins, 2016). However, finding evidence of bats (e.g. their droppings) on external surfaces that are unprotected from rainfall may be restricted if undertaken outside the main bat active season (May to September) and/or after periods of wet weather. Bat droppings inside buildings may also quickly disintegrate in damp conditions.

2.3 The survey was completed in the spring at the start of the main 2021 bat active season and evidence of bats would have been expected to be visible on external surfaces.

2.4 The suitability of on-Site buildings subject to potentially being altered as part of the development, for roosting bats was classified according to the categories and descriptions defined by Collins (2016) for roosting habitats, as summarised in **Table 2.1**.

Table 2.1: Guidelines for assessing the potential suitability of roosting habitats such as buildings and trees for bats (taken from Collins, 2016).

Suitability	Description of roosting habitat
Negligible	Negligible habitat features on site likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger number of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain Potential Roost Features (PRFs) but with none seen from the ground or features seen with only very limited roosting potential.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.

3 Results

Designated sites

3.1 The Site is not covered by any statutory or non-statutory wildlife site designation and does not occur close to any statutorily designated site. The closest statutory designated site is **Hounslow Heath Local Nature Reserve (LNR)** 0.5 km to the west but completely separated from the site by urban development. **Bushy & Home Park Site of Special Scientific Interest (SSSI)** 2.9 km to the south. See **Figure 1.1** for locations of statutory sites.

3.2 The Site is located within an outer Natural England (NE) development impact risk zone around this SSSI and other further afield SSSIs, but small-scale residential development of the type proposed here is not considered a threat to any SSSI in the vicinity of the Site by NE.

Habitats

3.3 The site was comprised of buildings, hard standing driveways and paths, and garden habitats - amenity grassland lawn and planted introduced shrub beds and tall Leylandii - of low biodiversity value that do not present a development planning constraint.

3.4 The Phase 1 habitat map is shown by **Figure 3.1**.

Fauna

Bats

Preliminary Bat Roost Assessment

3.5 All of the trees in the site were small and devoid of features of value to roosting bats or hole nesting birds.

3.6 The only bat roost potential related to buildings within the Site as described.

38 Vincam Close

3.7 The dwelling was a semi-detached two-storey property that shared a gabled pitched roof with the adjoining property (40 Vincam Close). It was of brick construction with pebble dashed rendered walls. The building had a two-storey extension with a shallow hipped roof covered in concrete pantiles with felt covered flat roof projections.

3.8 The following potential bat roost features (PRFs) were present:

- Soffit gaps;
- lifted lead flashing between flat roofed extension and main roof
- vertical gap between vertical timber and pebble dash infill on front facing gable.

3.9 No evidence of bats was present on the exterior of the building, and it was assessed as possessing **low bat roost suitability**.

3.10 There was a flat roofed garage outbuilding in the garden that was of **negligible bat roost suitability**.

40 Vincam Close

3.11 The dwelling was a semi-detached two-storey property that shared a gabled pitched roof with the adjoining property (38 Vincam Close). It was of brick construction with painted rendered walls. The roof was covered in clay pantiles and had a relatively new and large dormer extension on the south facing pitch. The dormer was clad in well fitted clay hanging tiles.

3.12 The following potential bat roost features (PRFs) were present:

- Gaps between pantiles;
- rotten timber facia board on the south facing eave that had a hole that appeared to being used by nesting house sparrow;
- missing ridge tile mortar gap;
- lifted lead flashing around chimneys.
- eave gap at gable apex behind the timber facia on the front facing gable.

3.13 No evidence of bats was present on the exterior of the building, and it was assessed as possessing **low bat roost suitability**.

3.14 There was a flat roofed garage outbuilding in the garden that was of **negligible bat roost suitability**.

42 Vincam Close

3.15 The building was a detached single storey brick-built bungalow with a hipped concrete pantile covered roof and a flat roofed single garage attached to one side of the building.

3.16 No evidence of bats was present on the exterior of the building, and no obvious bat roost features were present.

3.17 The roof tiles were all well sat and lacked obvious gaps, including missing mortar below the ridge tiles. The soffits were well fitted and lacked obvious gaps that could be accessed by bats.

3.18 There was a slightly lifted area of lead flashing around the chimney base on the north side of the property, but no associated evidence of bats and no compelling reason to suspect the gap was used by bats.

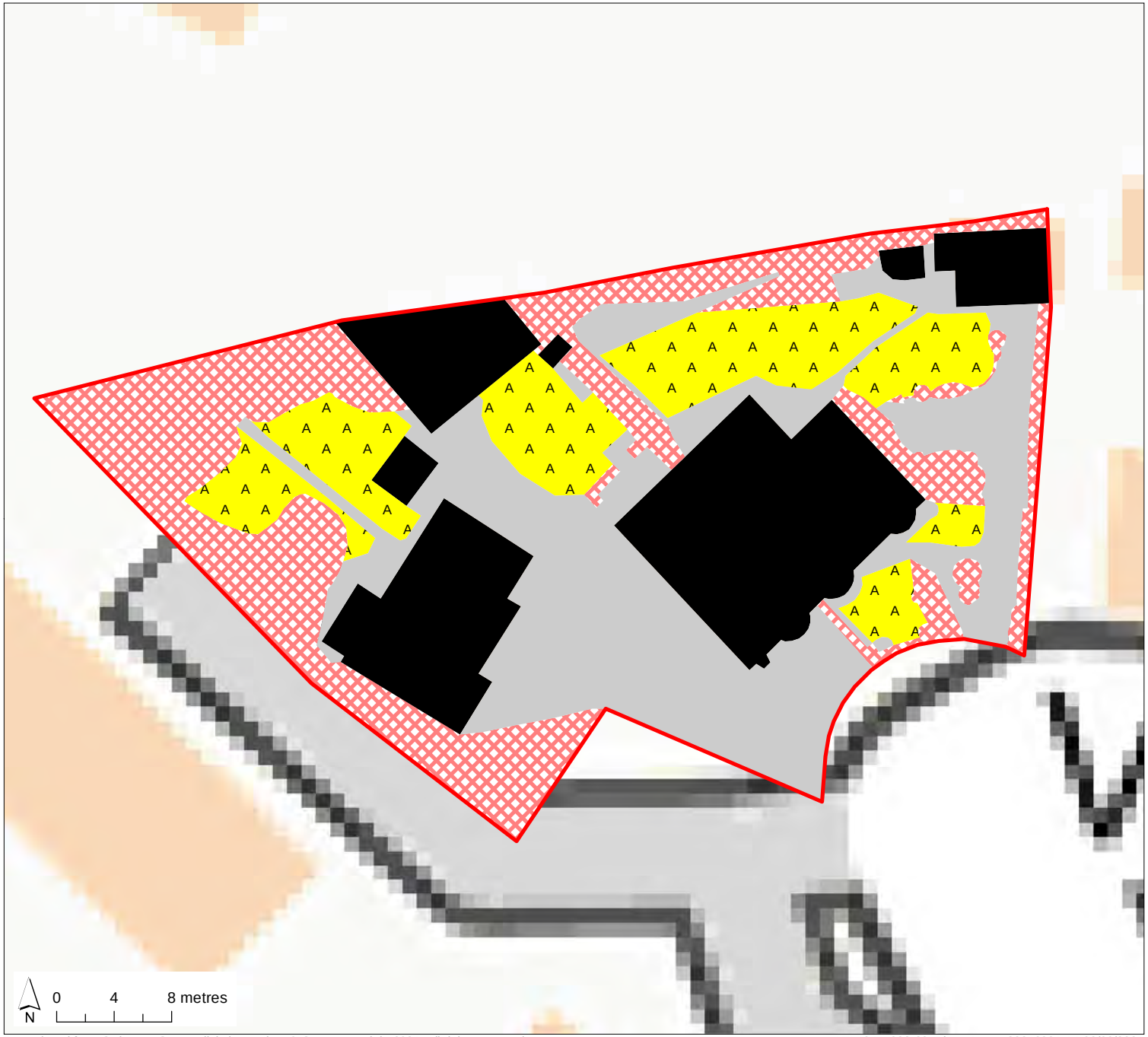
3.19 In overall terms, given the lack of bat evidence, dearth of potential bat roost features, and suburban location the property was considered to be of **negligible bat roost suitability** as set out previously in **Table 2.1**.

Birds

3.20 House sparrow appeared to be nesting in the front gable end of 38-40 Vincam Close, and the Leylandii and other introduced shrub habitats in the gardens has potential to support small numbers of garden nesting birds.

Other species

3.21 No obvious evidence of other faunal species was seen within the Site during the survey, although it is anticipated that the gardens may be used by fox.



Vincam Close, Richmond

Phase 1 habitat map

- Site boundary
- amenity grassland
- introduced shrubs
- hard-standing
- buildings

Figure 3.1

Map Scale @ A4: 1:400

Surveyed by: DP	
Survey date: 18 May 2021	
Drawn by: RD	
Checked by: DP	
Status: Final	

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Photo 1 - 38-40 Vincam Close - front elevations

Photo 2 - 38 Vincam Close back garden

Photo 3 - 40 Vincam Close - back garden

Photo 4 - 40 Vincam Close side elevation

Photo 5 - 42 Vincam Close front elevation

Photo 6 - 42 Vincam Close back garden area

4 Conclusions and Recommendations

Conclusions

4.1 The Site was comprised of residential buildings and associated garden land of negligible to low ecological and biodiversity value with very limited faunal interest located within a densely populated suburban area with negligible habitat connectivity to habitats of higher ecological and habitat value.

4.2 The semi-detached dwelling 38-40 Vincam Close lacked evidence to suggest it was used by bats for roosting but possessed a number of potential bat roost features that meant the property was assessed as possessing low overall bat roost suitability in accordance with best practice survey guidance.

4.3 The presence of small numbers of roosting bats in the building is a theoretical possibility, and the pair of dwellings should be subject to single after dark bat roost emergence or return to roost survey to verify bat roosting absence given the proposal is to remove the building to enable redevelopment of the plot.

4.4 Number 42 Vincan Close was assessed as being of negligible bat roost suitability and could be removed without restriction in relation to bats.

Recommendations

Survey

Bats

4.5 In line with best practice guidance, follow-up bat activity survey of 40-42 Vincam Close is required to verify bat roosting absence given the building is to be demolished to enable the development.

4.6 Bat survey of buildings to establish bat use should be completed during May-August to coincide with the maternity period when bats are giving birth and rearing young such that the presence/absence of a breeding roost can be verified. In this instance (low suitability buildings) a single after dark bat activity survey to verify bat roosting absence is required.

Birds

4.7 The building should be removed after the bird nesting period or following confirmation by an ecologist that it is free of nesting birds and their dependent young at other times.

Ecological enhancements

4.8 A scheme of bat and house sparrow box provision in the wider site on new buildings could be considered as a meaningful and relatively inexpensive ecological enhancement and is recommended.

4.9 Bird nest bricks need to be on north facing elevations, bat boxes on south, east or west elevations at heights of 3 m or more above ground with no obstruction below the box entrances.

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