



Edmanson's Close, Tottenham

Preliminary Ecological Appraisal

Prepared by
CSA Environmental

on behalf of
d + b Studios

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This report may contain sensitive ecological information. It is the responsibility of the Local Authority to determine if this should be made publicly available.

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EXECUTIVE SUMMARY

Redevelopment works are proposed at Edmanson's Close, Tottenham, for which detailed planning permission will be sought.

CSA Environmental was instructed by d + b Studios to undertake a Preliminary Ecological Appraisal (PEA) of the Site to identify ecological constraints to development, inform recommendations for design, highlight opportunities for ecological enhancement and determine any additional investigation/survey necessary.

As part of this PEA, a desk study and extended Phase 1 Habitat survey of the Site were undertaken in November 2019. The Site comprises a series of terraced almshouses built around a central green, with several additional detached buildings surrounding.

Several nature conservations designations are within close proximity of the Site, however through informal consultation with Natural England it has been concluded that no likely significant effects arising from the proposed redevelopment upon these designations are predicted. A number of buildings at the Site have been externally assessed as having 'Low' to 'Moderate' potential for roosting bats, triggering the need for further internal inspections and nocturnal presence/likely absence surveys.

The central orchard present at the Site is considered to be of ecological importance. This habitat is to be retained under the proposals and suggested enhancement measures are set out herein.

To promote adherence to the NPPF and policy SP13 'Open Space and Biodiversity' within Haringey's Local Plan, a number of additional enhancement measures that could be delivered as part of the proposed redevelopment have been recommended including integrated bird and bat boxes and 'bug hotels'.

1.0 INTRODUCTION

- 1.1 This report has been prepared by CSA Environmental on behalf of d + b Studios It sets out the findings of a Preliminary Ecological Appraisal (PEA) of Edmanson's Close, Tottenham (hereafter referred to as 'the Site'). Redevelopment is proposed at the Site, for which detailed planning permission will be sought.
- 1.2 The scope of this appraisal has been determined with due consideration for best-practice guidance provided by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2017), and to the *Biodiversity: Code of practice for planning and development* (BS 42020:2013) published by the British Standards Institution (2013).
- 1.3 The Site occupies an area of c. 1ha and is located around central grid reference TQ335905, to the north of Tottenham. It consists of a series of terraced almhouses built around a central green, with several additional detached buildings surrounding (see Habitats Plan in Appendix A).
- 1.4 A desk study and extended Phase 1 Habitat survey were undertaken of the Site, the findings of which are presented herein.
- 1.5 This PEA aims to:
 - Identify any ecological constraints to development of the Site
 - Inform design decisions
 - Identify further ecological surveys and investigation necessary to inform a full Ecological Impact Assessment (EclA) of the Site
 - Highlight opportunities for ecological enhancement
- 1.6 As set out in best practice guidelines (CIEEM, 2017) a PEA is typically only suitable for planning submission where there are no ecological constraints relating to the project. Where ecological constraints are identified, such as the presence of important ecological features, the effects of development on these features should be assessed within a separate EclA report, which would supersede the PEA.

2.0 LEGISLATION, PLANNING POLICY & STANDING ADVICE

Legislation

- 2.1 Legislation relating to wildlife and biodiversity of particular relevance to this PEA includes:
- The Conservation of Habitats and Species Regulations 2017
 - The Wildlife and Countryside Act 1981 (as amended)
 - The Natural Environment and Rural Communities (NERC) Act 2006
 - The Protection of Badgers Act 1992
- 2.2 This above legislation has been addressed, as appropriate, in the production of this report. Further information on the above legislation is provided in Appendix B.

National Planning Policy

- 2.3 The National Planning Policy Framework (NPPF) (Ministry of Housing, Communities and Local Government, 2019) sets out the government planning policies for England and how they should be applied. Chapter 15: Conserving and Enhancing the Natural Environment, is of particular relevance to this report as it relates to ecology and biodiversity. Further details are provided in Appendix B.
- 2.4 The Government Circular 06/2005, which is referred to by the NPPF, provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their effects within the planning system.

Local Planning Policy

- 2.5 A number of local planning policies relate to ecology, biodiversity and/or nature conservation. These are summarised in Table B.1 of Appendix B. These policies have been addressed, as appropriate, in the production of this report.

Standing Advice

- 2.6 Natural England and Defra's Standing Advice (Natural England & Defra, 2014) regarding habitats and protected species aims to support local authorities and forms a material consideration in determining applications in the same way as any individual response received from Natural England following consultation. Standing advice has therefore been given due consideration, alongside other detailed guidance documents, in the production of this report.

3.0 METHODS

Desk Study

- 3.1 The Multi-Agency Geographic Information for the Countryside (MAGIC) online database was reviewed in November 2019 to identify nature conservation designations within the following search radii:
- Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Ramsar sites within 10km of the Site (including possible/proposed sites)
 - Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Local Nature Reserves (LNR) within 3km of the Site
 - Other relevant data e.g. Ancient Woodland Inventory within 1km of the Site
- 3.2 A review was undertaken of the location of any such designations, their distance from and connectivity with the Site, and the reasons for their designation. This information was used to determine whether they may be within the Site's zone of influence.
- 3.3 Greenspace Information for Greater London (GiGL) was contacted for details of any non-statutory nature conservation designations and records of protected/notable habitats and species. This information was requested for an area encompassing the Site and adjacent land within c. 1km of its central grid reference. This search area was selected to include the likely zone of influence upon non-statutory designations and protected or notable habitats and species.
- 3.4 The Woodland Trust's online Ancient Tree Inventory was reviewed for known ancient or veteran trees within the Site and adjacent land.
- 3.5 In accordance with Natural England's Great Crested Newt Mitigation Guidelines (2001), a desktop search was undertaken to identify ponds within 500m of the Site which may have potential to support breeding great crested newts *Triturus cristatus*, using Ordnance Survey (OS) mapping, the MAGIC database and aerial photography.
- 3.6 All relevant desk study data are presented in Appendix C.

Field Survey

Extended Phase 1 Habitat Survey

- 3.7 An extended Phase 1 habitat survey was carried out in fine and dry weather conditions on 28 November 2019 by Michelle Bullock MCIEEM and Emma Robson GradCIEEM, encompassing the Site and immediately adjacent habitats that could be viewed.

3.8 Phase 1 Habitat survey is a method of classification and mapping wildlife habitats in Great Britain. It was originally intended to provide “...*relatively rapidly, a record of the semi-natural vegetation and wildlife habitat over large areas of countryside.*” The Phase 1 Habitat Survey method has been widely ‘extended’ beyond its original purpose to allow the capture of information at an intermediate level between Phase 1 and Phase 2 Habitat surveys, and here includes the following:

- More detailed floral species lists for each identified habitat
- Descriptions of habitat structure, the evidence of management and a broad assessment of habitat condition
- Mapping of additional habitat types (e.g. hardstanding)
- Identification of Priority Habitats under Section 41 of the NERC Act
- Identification of Habitats Directive Annex I habitat types
- Evidence of, or potential for, European Protected Species (EPS) (including bats, great crested newt, dormouse and otter)
- Evidence of, or potential for, other protected species (including birds, reptiles, water vole, badger and certain invertebrates)
- Evidence of, or potential for, other notable species (including S41 Species of Principal Importance as well as notable, rare, protected or controlled plants and invertebrates)

3.9 Results of the extended Phase 1 Habitat survey are presented on the Habitats Plan in Appendix A.

Preliminary Roost Assessment (Trees and Structures)

3.10 All accessible buildings and established trees on-site were inspected externally and assessed for their potential to support roosting bats, with due consideration for the *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collins, 2016). Full survey methods and results are provided in Appendix D.

Limitations

3.11 There were no specific limitations to the desktop study, however it should be noted that the extended Phase 1 habitat survey was conducted at sub-optimal time of year for botanical identification.

Evaluation and Assessment

3.12 The evaluation and assessment of ecological features is beyond the scope of a PEA and has therefore not been undertaken here. Formal evaluation and assessment of any identified important ecological features should be undertaken as part of either a full EclA, or receptor-specific survey and assessment in accordance with the published CIEEM method (CIEEM, 2018).

4.0 BASELINE ECOLOGICAL CONDITIONS

Nature Conservation Designations

Statutory

- 4.1 There are no statutory designations covering any part of the Site.
- 4.2 Three international statutory designations were identified within 10km of the Site; Lee Valley Ramsar/SPA (c. 1.5km east of the Site) and Epping Forest SAC (c. 5.1km east of the Site).
- 4.3 Two national statutory designations were identified within 3km of the Site; Walthamstow Reservoirs SSSI (c. 1.5km east of the Site) and Walthamstow Marshes SSSI (c. 2.9km south-east of the Site).
- 4.4 Two local statutory designations were identified within 3km of the Site; Springfield Park LNR (c. 2.8km south-east of the Site) and Railway Fields LNR (c. 2.8km south-west of the Site).
- 4.5 These statutory designations are described in Table 1 below.

Non-Statutory

- 4.6 Five non-statutory designations were identified within 1km of the Site (see Table 1 below).

Table 1. Statutory and Non-Statutory Designations within search radii

Site Name & Designation	Distance & Direction from Survey Area	Special Interests or Qualifying Features
International Designations within 10km		
Lee Valley Ramsar	c. 1.5km east	Ramsar criterion 2: The site supports the nationally scarce plant species whorled water-milfoil <i>Myriophyllum verticillatum</i> and the rare or vulnerable invertebrate <i>Micronecta minutissima</i> (a water-boatman). Ramsar criterion 6: species/populations occurring at levels of international importance- Northern shoveler and Gadwall.
Lee Valley SPA	c. 1.5km east	This site qualifies under Article 4.1 of the Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive: • Bittern This site also qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:

		• Gadwall • Shoveler
Epping Forest SAC	c. 5.1km east	Annex I habitats that are a primary reason for selection of this site: • Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site • Northern Atlantic wet heaths with <i>Erica tetralix</i> • European dry heaths Annex II species that are a primary reason for selection of this site: • Stag beetle <i>Lucanus cervus</i>
National Designations within 3km		
Walthamstow Reservoirs SSSI	c. 1.5km east	The Walthamstow Reservoirs contain one of the country's major heronries and a particularly large concentration of breeding wildfowl. They are also an important gathering area for moulting tufted duck and in winter attract nationally significant populations of wildfowl and other wetland birds.
Walthamstow Marshes SSSI	c. 2.9km south-east	Walthamstow Marshes are one of the last remaining examples of semi-natural wetland in Greater London. They contain a variety of plant communities typical of a former flood plain location, such as a range of neutral grassland types, sedge marsh, reed swamp, willow scrub and areas of tall herb vegetation
Local Designations within 3km		
Springfield Park LNR	c. 2.8km south-east	A 16ha park on a unique geology with a diverse array of habitats including wetlands and woodland. The park forms an important green-corridor linking the mosaic of Hackney's greenspaces.
Railway Fields LNR	c. 2.8km south-west	A small 0.8ha park on a former railway depot providing range of habitats including woodland, scrub, meadow, ponds and marshland.
Non-Statutory Designations within 1km		
Tottenham Cemetery, All Hallows Churchyard and Bruce Castle Park SINC	c. 0.03km north	Large area of open parkland, with some ancient oak trees. The site supports numerous migrant birds in spring and autumn. Small areas of grass are managed as meadow.
Bruce Grove Wood SINC	c. 0.2km south	Small area of woodland with old beech trees.

Tower Gardens SINC	c. 0.6km west	Park containing mature trees, native woodland and scrub.
Lordship Lane Recreation Ground SINC	c. 0.8km west	A large park with a length of stream and a pond bound by large white willows. Adjacent damp grassland contains marsh foxtail.
Down Lane Recreation Ground SINC	c. 0.8km south-east	A park with substantial areas of native woodland and scrub planting, and areas managed as meadows.

Ancient Woodland

- 4.7 There is no Ancient Woodland covering any part of the Site or immediately adjacent land. No trees on or adjacent to the Site are listed on the Ancient Tree Inventory. A veteran, ancient sessile oak tree is present within Bruce Castle Park- the 'Bruce Castle Oak' c. 200m north of the Site. This tree was runner up in England Tree of the Year 2018.

Habitats and Flora

- 4.8 Habitats recorded on-site were classified in line with current Phase 1 habitat survey guidance (JNCC, 1990), as illustrated in Appendix A.

Notable Flora Records

- 4.9 A total of 256 records of 93 notable plant species from within the search area. Those of potential relevance to the Site include annual knawel *Scleranthus annuus*, shepherd's-needle *Scandix pecten-veneris*, wild clary *Salvia verbenaca* and common gromwell *Lithospermum officinale*. None of the above were recorded during the Phase 1 survey however it should be noted that the survey was conducted outside of the peak flowering season.

Amenity Grassland

- 4.10 The Site is dominated by amenity grassland, including a large green to the centre of the development, covering c. 0.36ha. The green also comprises several cherry trees (see orchard below). The grassland sward appears to be regularly managed by mowing and species present include abundant perennial rye-grass *Lolium perenne*, yarrow *Achillea millefolium*, daisy *Bellis perennis*, cat's ear *Hypochaeris* sp. and dandelion *Taraxacum* agg.. Species less frequently recorded include false oat grass *Arrhenatherum elatius*, cock's foot *Dactylis glomerata*, knot grass *Polygonum* sp. and creeping buttercup *Ranunculus repens*. Locally abundant sheep's sorrel *Rumex acetosella* was recorded within the grassland, as well as common bent *Agrostis capillaris* and red fescue *Festuca rubra* - possible indicating underlying acidic soil conditions.
- 4.11 Amenity grassland also makes up the majority of the rear gardens and communal gardens which are also be closely mown. Perennial rye-grass, Yorkshire fog *Holcus lanatus*, creeping buttercup, white clover *Trifolium*

repens and daisy were recorded in abundance, with some occasional green alkanet *Pentaglottis sempervirens*, white dead nettle *Lamium album*, common nettle *Urtica dioica*, mugwort *Artemisia* sp., creeping thistle *Cirsium arvense* and ground ivy *Glechoma hederacea* also recorded.

- 4.12 With the exception of the orchard grassland (see below), amenity grassland at the Site is of limited intrinsic ecological value.

Buildings

- 4.13 The majority of the buildings at the Site comprise of terraced, brick-built almshouses constructed in 1870, some of which are in current occupation. A central chapel is present to the middle of the main terrace, complete with spire. In addition, a single storey laundry building (B10) and a two storey detached building (B11) exist to the east of the Site. A section of infill building believed to have occurred in the 1970s is present between two blocks of original almshouses (B8). A full list and overview of the buildings at the Site is provided within Appendix D (Table D.1). In addition, an assessment of their suitability for roosting bats has also been included.

Hardstanding

- 4.14 Areas of hardstanding are present within the Site associated with the on-site buildings. These areas include the main access road, pavements and paths. None support features of ecological interest.

Introduced shrub

- 4.15 The Sites frontage is made up for a linear bed of introduced shrub planting including but not limited to; holly *Ilex aquifolium*, rose-of-Sharon *Hypericum calycinum*, berberis *Berberis* sp., Spindle *Euonymus* sp., cherry *Prunus* sp., cherry laurel *Prunus laurocerasus*, yew *Taxus baccata* and cypress *Cupressus* sp..
- 4.16 In addition, several front and rear gardens comprise introduced shrub of similar species to those listed above and planted beds were recorded within the communal garden to the north-east of the Site, some of which appear disused and neglected.
- 4.17 Being dominated by ornamental, non-native species, introduced shrub at the Site is of limited intrinsic ecological value, however it is likely to provide food resources and shelter for a range of species.

Orchard

- 4.18 A c. 0.36ha cherry orchard is present to the south of the Site comprising of approximately 20 trees. The majority of trees present are considered to be young to semi-mature with the exception of two mature trees to the north-east.

- 4.19 Given the intensity of management currently undertaken to this habitat (associated grassland is frequently closely mown and deadwood removed etc.) it is not considered to meet the criteria to be considered a NERC Act Section 41 (S41) habitat of principal importance. It is however listed on the Priority Habitat Inventory as illustrated on Magic Map however such designations are often based on aerial imagery alone.
- 4.20 Based on the above, given the current management and relative young age of the habitat, ecological interest is considered to be limited to the semi-mature and mature trees. However given its urban setting, the rarity of such a habitat is thought to add its value. In addition, with the maturation of the younger fruit trees and several straightforward enhancement measures, the ecological importance of the habitat could be heightened.

Trees

- 4.21 The majority of the trees present at the Site are associated with the orchard as mentioned above. The Site frontage is made up of a line of mature common lime *Tilia x europaea* trees which have been pleached over the years. In addition several off-site trees were noted along the Sites northern boundary- some of which overhang the Site, including horse chestnut *Aesculus hippocastanum*, cherry and apple *Malus* sp..
- 4.22 A row of trees is present to the north of the communal garden including oak *Quercus* sp., yew and pear *Pyrus* sp.
- 4.23 Given their size and age, many of the tree are considered to be of ecological importance, given their contribution to Site biodiversity.

Hedgerows

- 4.24 A conifer hedgerow is present along the north-eastern Site boundary, beyond the row of trees mentioned above. A well-managed garden privet *Ligustrum ovalifolium* hedgerow bounds the front garden of B11, along which common lime trees are also present.
- 4.25 Given the non-native nature of the hedgerows at the Site, neither are considered to be an S41 priority habitat or are considered to be of intrinsic ecological importance.

Fauna

Bats

- 4.26 A total of 20 bat records were identified within the search area, dating from 1992 to 2010. These include the following species: Daubenton's *Myotis daubentonii*, Noctule *Nyctalus noctula*, common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus* and pipistrellus species. The closest record is for common pipistrelle c. 1.9km south of the Site however no detail is provided of the type of record (e.g.

roost). A search of granted EPS mitigation licences on Magic revealed that a licence for the damage and destruction of a common pipistrelle resting place was granted c. 1.7km north of the Site and a licence for the destruction of a brown long-eared resting place was granted c. 2.4km south-east of the Site.

Preliminary Roost Assessment - Structures

- 4.27 All on-site structures were assessed externally for their potential to support roosting bats. Of these 11 buildings (labelled B1-B11 on the Habitats Plan in Appendix A), one is considered to have 'Moderate' bat roost potential (B8), eight are considered to have 'Low' potential (B1-7 and B9) and two are considered to have 'Negligible' potential (B10 and 11). The full results of the building inspection are provided in Table D.1 of Appendix D and are illustrated in the Preliminary Bat Roost Assessment Plan (CSA/4443/101).

Preliminary Roost Assessment - Trees

- 4.28 All on-site trees were inspected during a preliminary ground level assessment to determine bat roost potential. One tree is considered to have 'Moderate' bat roost potential and six are considered to have at least 'Low' potential. All other trees present at the Site are considered to have 'Negligible' potential. The full results of the tree inspection are provided in Table D.2 of Appendix D and are illustrated in the Preliminary Bat Roost Assessment Plan (CSA/4443/101).

Badger

- 4.29 No records for badger *Meles meles* were returned from within the search area.
- 4.30 No evidence of badgers or their setts, were recorded within the Site during the initial Phase 1 survey. Given that the Site is in current occupation with high levels of human activity, badgers are unlikely to make use of any albeit- limited suitable habitats (e.g. sheltered tree bases and grassland) present at the Site for sett digging.
- 4.31 Mammal holes were recorded at the base of a mature yew tree in the north of the Site (Target Note 1 on Habitats Plan). However, given the shape, character and setting of the holes, coupled with anecdotal evidence, these are believed to be a fox *Vulpes vulpes* den.

Hedgehog

- 4.32 A total of five records of hedgehog *Erinaceus europaeus* were returned from within the search area. The closest record is c. 0.5km north of the Site, dated 2001. Habitats within the Site which are likely of importance to hedgehogs include the orchard, hedgerows and communal gardens. Hedgehogs are listed under Section 41 of the NERC Act (2006) as a species of principle importance in regard to their conservation.

Other Mammals

- 4.33 No other notable or protected mammal records were returned (i.e. brown hare *Lepus europaeus*, harvest mouse *Micromys minutus*, otter *Lutra lutra*, water vole *Arvicola amphibius* and dormouse *Muscardinus avellanarius*). The Site lacks the habitat requirements required by these mammals and therefore these species are likely absent.

Birds

- 4.34 A total of 557 records of 58 bird species were identified within the search area, dating from 1986 to 2014. Those of potential relevance to the Site include swift *Apus apus*, starling *Sturnus vulgaris*, song thrush *Turdus philomelos* and peregrine falcon *Falco peregrinus*.
- 4.35 An old wren *Troglodytes troglodytes* nest was noted within one of the porch structures of B3. In addition feral pigeon *Columba livia* were recorded frequently during the Phase 1 survey and may utilise suitable features for roosting and nesting.
- 4.36 Hedgerows, introduced shrub and orchard habitats are likely to provide nesting and foraging habitats for a range of urban specialist birds.

Reptiles

- 4.37 No records for any reptile species were returned from within the search area.
- 4.38 The on-site habitats do not provide the structural diversity required for reptiles to bask, forage and seek refuge. As such, and coupled with the urban context, it is unlikely the Site support any reptile species.

Amphibians

- 4.39 A total of five records of common frog *Rana temporaria* were returned from within the search area, the closest record being c. 0.5km north of the Site.
- 4.40 Amphibians are dependent upon the presence of suitable aquatic breeding habitat in order for a population to persist, however there are no potential breeding ponds on-site or within a dispersible range of the Site. A waterbody visible on OS mapping appears to be located within Bruce Castle Park, however further ground truthing confirmed this to be a paddling pool, dry at the time of the visit. There are limited on-site terrestrial habitats suitable for amphibians except for some isolated areas of shrub. As such, it is unlikely that the Site supports any amphibian species.

Invertebrates

- 4.41 A total of 50 records of 23 invertebrate species were identified within the search area. Those of potential relevance to the Site include stag beetle

Lucanus cervus, white-letter hairstreak *Satyrus w-album* and cinnabar *Tyria jacobaeae*.

- 4.42 The majority of the Site is taken to be of limited interest to invertebrates. Habitats with the potential to sustain greater assemblages are limited to the mature cherry and pleached lime trees present at the Site.

5.0 DISCUSSION AND RECOMMENDATIONS

- 5.1 The Site currently supports 13 apartments for those aged over 65. Planning permission is sought for the refurbishment of existing buildings and the construction of new pavilion buildings, apartment blocks and mews houses. In total, the proposals shall provide 34 family dwellings.

Nature Conservation Designations

Statutory

Lee Valley Ramsar/SPA and Walthamstow Reservoirs SSSI

- 5.2 The Site lies c. 1.5km from the Lee Valley Ramsar/SPA and Walthamstow Reservoirs SSSI. No direct impact pathways are thought to exist between the Site and these designations. Furthermore following informal consultation with Natural England, it has been advised that the proposed development can be 'screened out' under the Habitats Regulations and no likely significant effects (LSE) are predicted.

Epping Forest SAC

- 5.3 The Site lies c. 5.1km from Epping Forest SAC. Interim advice provided by Natural England on the 06 March 2019 (Letter ref. 259129) published a Zone of Influence (Zoi) of 6.2km whereby any applicable project which lies within this Zoi constitutes a LSE on the sensitive interest features of the SAC through increased recreational pressure, either when considered 'alone' or 'in combination'.
- 5.4 However further informal advice received from Natural England on the 06 December 2019 suggests that as a result of further visitor surveys, a revised advice note is due and that the Borough of Haringey is likely to be screened out. It is therefore concluded that given the scale and distance of the development from the SAC, coupled with NE recent correspondence, no LSE are predicted and no further screening is required.

Walthamstow Marshes SSSI

- 5.5 The Site lies c. 2.9km from the SSSI. In accordance with the Impact Risk Zone (IRZ) published by Natural England, the development proposals do not require any further screening in relation to the SSSI. It is thought that the proposals are far enough removed to have no significant effect on the SSSI.

LNRS

- 5.6 No significant adverse effects are anticipated to either of the nearby LNRS given the distance of the Site to the reserves and the only slight relative increase in the local population (approximately 82 residents based on 2.4 people per dwelling).

Non-Statutory

Tottenham Cemetery, All Hallows Churchyard and Bruce Castle Park SINC

- 5.7 Given the proximity of the Site to the SINC, the increase in the local population brought about by the proposals are likely to see an increase in footfall within the park. Some habitats/species present at the SINC may be potentially sensitive to heightened visitor numbers however given the relatively small increase in the local population and likely recreational pressures currently experienced by the SINC it is not considered to represent a constraint to redevelopment of the Site.

*Other SINC*s

- 5.8 No significant adverse effects are anticipated to any of the other SINC
- s given the distance of the Site to the SINCs and limited increase in the number of residents.

Habitats and Flora

Amenity Grassland

- 5.9 Restricted areas of the orchard grassland at the Site show heightened levels of ecological interest by the presence of several common grassland indicator species including sheep's sorrel and common bent. Due to the underlying soil conditions (acidic), opportunities exist for the successful enhancement of such areas via a straight forward, more relaxed management regime, whereby pockets of grassland could be left to grow, resulting in a taller sward of heightened benefit for a range of species, notably pollinators. In addition, sections of the grassland could be further enhanced through harrowing and subsequent overseeding with an appropriate wildflower seed mix.

Orchard

- 5.10 The orchard at the Site is unlikely to qualify as S41 habitat of principal importance, however given its urban setting and presence of semi-mature and mature fruit trees, it is considered to be of ecological importance. It is therefore recommended that this habitat should be retained in its entirety. As mentioned above, with the implementation of a more relaxed management regime, both of the grassland beneath and trees themselves, and several straight-forward enhancement measures such as new tree planting (including a range of different fruit tree species) could increase the biodiversity value of the orchard, with the potential for it to be considered an S41 habitat in the future.
- 5.11 In addition to the above, the orchard could be offered as a 'community orchard' to new residents and in turn, where residents are forthcoming, be managed by a residents group. Such initiatives help bring communities together and closer to their natural environment.

Trees

- 5.12 Tree removals are understood to be limited to the group of trees to the north-eastern boundary of the Site (Norway maple, yew, red oak and pear). It is anticipated that new tree planting at the Site would compensate for the loss of such trees.

Fauna

Bats

- 5.13 Buildings with 'Low' and 'Moderate' potential to support roosting bats have been identified at the Site.
- 5.14 Internal inspections and further emergence/re-entry surveys are required to determine the presence or likely-absence of roosting bats in association with the on-site buildings. The results of these surveys will be used to inform a full impact assessment and the need or otherwise for mitigation measures.
- 5.15 In the event that bat roosts are identified at the site within one or more of the existing buildings proposed for demolition/refurbishment, it is anticipated that mitigation could be readily accommodated for within the proposals and would likely require the following:
- Works to be undertaken under the auspices of an appropriate licensing regime (such as a European Protected Species Mitigation (derogation) licence obtained from Natural England)
 - Precautionary approach to demolition, including appropriate timing of works, work undertaken under supervision and
 - Provision of new roosting features within the Site, such as those integrated into new buildings, providing equivalent or greater opportunities for those bat species identified to roost on-site
 - Careful design of any new external lighting scheme to ensure bats can continue to make use of the site, including to forage and navigate, as well as to roost
- 5.16 Should any trees with the potential to support roosting bats require removal or significant arboricultural works then further surveys should be undertaken to confirm the presence or likely absence of roosting bats and to inform mitigation measures where required.

Fox

- 5.17 An active fox den is understood to be present to the base of the yew tree to the north-east of the Site. Although not of conservation concern, foxes are protected under The Animal Welfare Act 2006 and The Wild Mammals (Protection) Act 1996 against 'unnecessary suffering'. Should the destruction of the den be required to make way for development of the Site, measures should be put in place to ensure the humane

displacement of any animals present and that destruction of the den is only carried out once it has been confirmed that no animals are present.

Hedgehog

- 5.18 The Site currently provides good connectivity for hedgehog. The redevelopment of the Site should seek to maintain this connectivity, and where required employ the use of hedgehog 'cut-outs' within any new garden fencing.

Birds

- 5.19 Based on their legal protection, any clearance of potential nesting habitat (including demolition of buildings) will be undertaken outside of the bird nesting season (i.e. outside of March-August inclusive), or immediately following confirmation by a suitably qualified ecologist that no active nests are present.
- 5.20 Opportunities for new bird nest sites could be provided by the redevelopment of the Site- detailed below within the Enhancements.

Summary of Recommendations

- 5.21 Based on the ecological constraints identified above, Table 2 summarises recommendations for further work necessary to determine the need for, and scope of, any avoidance, mitigation and/or compensation measures to address potential adverse effects of development. The outcome of this further work will inform an EcIA of the final scheme.

Table 2. Recommendations for further investigation/survey

Ecological Feature	Further work	Applicable timescales
Bats	Internal roof void inspections	Anytime
	Dusk/pre-dawn emergence/return surveys	May - August

Opportunities for Ecological Enhancement

- 5.22 To promote adherence to the NPPF and policy SP13 Open Space and Biodiversity within Haringey's Local Plan Strategic Policies 2013 – 2026 the following opportunities for ecological enhancement have been identified:
- **Orchard enhancement** through adapted management regime (to create **unmown swathes** of longer grassland), **new fruit tree planting** and **harrowing/overseeding** with an appropriate wildflower seed mix (e.g. . Emorsgate EM7F – Wild Flowers For Sandy Soils)
 - Aspirations for the concept of a **community orchard** to be ran by a residents group.

- Incorporation of **native plants** and those of wildlife importance in to landscaping scheme to provide foraging opportunities for birds, invertebrates and bats
- Provision of new **integrated bat roosting and bird nesting** opportunities within new buildings
- Retention of **hedgehog connectivity** and provision of hedgehog gaps in new fencing
- Provision of **log piles and 'bug hotels'** for the benefit of invertebrates and to promote connections with nature within younger generations.

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Appendix A

Habitats Plan & Photosheet

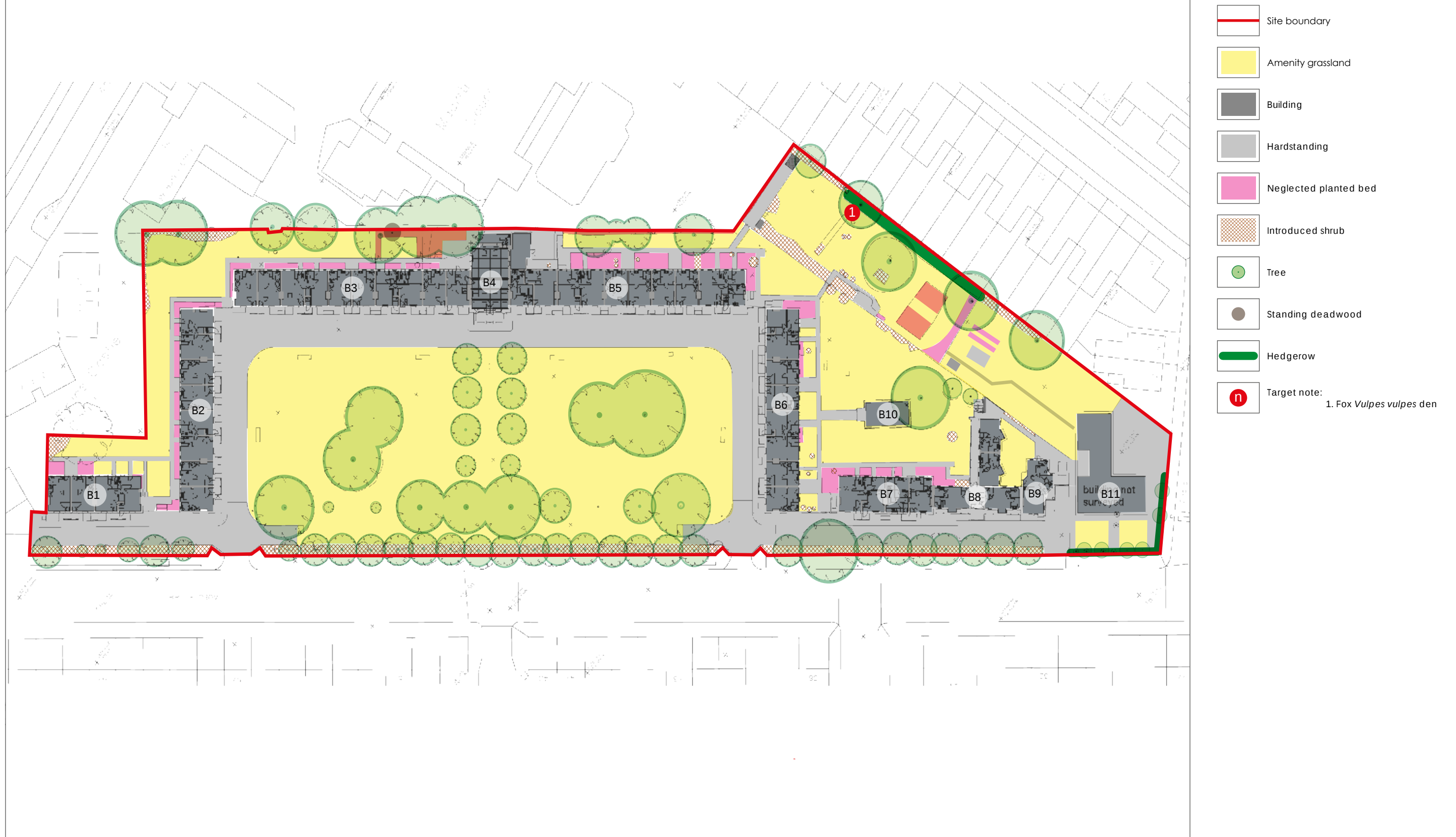




Photo 1. Overview of the Site and orchard.



Photo 2. Mature cherry trees.



Photo 3. Typical front elevation of almshouses.



Photo 4. 70s infill building (B7).



Photo 5. Central chapel building (B4).



Photo 6. Building 10.



Photo 1. Rear gardens.



Photo 2. Rear gardens and B9.



Photo 3. Typical rear elevations of almshouses.



Photo 4. Rear gardens of B1.



Photo 5. Loft space above lean-to extension.



Photo 6. Rear elevation of B10.

Appendix B

Legislation and Planning Policy

The **Conservation of Habitats and Species Regulations 2017** transposes Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, and aspects of Council Directive 79/409/EEC on the Conservation of Wild Birds, into UK domestic law. The Regulations make prescriptions for the designation and protection of Sites of Community Importance ('European sites', e.g. Special Areas of Conservation and Special Protection Areas) and European Protected Species (EPS).

The **Wildlife and Countryside Act 1981** (as amended, principally by the Countryside and Rights of Way Act 2000) forms the basis for protection of statutory designated sites of national importance (e.g. Sites of Special Scientific Interest; SSSIs) and native species that are rare and vulnerable in a national context. Additionally, badgers are protected under the **Protection of Badgers Act 1992**.

Section 40(1) of the **Natural Environment and Rural Communities (NERC) Act 2006** states that each public authority, "must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity." This legislation makes it clear that planning authorities should consider impacts to biodiversity when determining planning applications, with particular regard to the Section 41 (S41) lists of 56 habitats and 943 species of principal importance. The UK Biodiversity Action Plan (BAP) has been superseded by the Biodiversity 2020 Strategy, which continues to prioritise the S41 lists, however Local BAPs continue to influence biodiversity management and conservation effort, including through the spatial planning system, at the local scale.

The **National Planning Policy Framework (2019)** (NPPF) sets out government planning policies for England and how they should be applied. With regards to ecology and biodiversity, Chapter 15: Conserving and Enhancing the Natural Environment, paragraph 170, states that the planning system and planning policies should minimise impacts on and provide net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

Paragraph 175 sets out the principles that local planning authorities should apply when determining planning applications:

- If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts).
- 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.
- Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

The **Government Circular 06/2005**, which is referred to within the NPPF, defines statutory nature conservation sites and protected species as a material consideration in the planning process.

Local planning policies of relevance to ecology, biodiversity and/or nature conservation have been set out in Table B.1 below.

Table B.1. Summary of regional and local planning policy relating to ecology

Policy	Summary
The London Plan March 2016	
Policy 7.19 Biodiversity And Access To Nature	<i>“Strategic</i> <i>A The Mayor will work with all relevant partners to ensure a proactive approach to the protection, enhancement, creation, promotion and management of biodiversity in support of the Mayor’s Biodiversity Strategy. This means planning for nature from the beginning of the development process and taking opportunities for positive gains for nature through the layout, design and materials of development proposals and appropriate biodiversity action plans.</i> <i>B Any proposals promoted or brought forward by the London Plan will not adversely affect the integrity of any European site of nature conservation importance (to include special areas of conservation (SACs), special protection areas (SPAs), Ramsar, proposed and candidate sites) either alone or in combination with other plans and projects. Whilst all development proposals must address this policy, it is of particular importance when considering the following policies within the London Plan: 1.1, 2.1-2.17, 3.1, 3.3, 3.7, 5.4A, 5.14, 5.15, 5.17, 5.20, 6.3, 6.9, 7.14, 7.15, 7.25 – 7.27 and 8.1. Whilst all opportunity and intensification areas must address the policy in general, specific locations requiring consideration are referenced in Annex 1.</i> <i>Planning decisions</i> <i>C Development Proposals should:</i>

Policy	Summary
	<i>a wherever possible, make a positive contribution to the protection, enhancement, creation and management of biodiversity</i> <i>b prioritise assisting in achieving targets in biodiversity action plans (BAPs), set out in Table 7.3, and/or improving access to nature in areas deficient in accessible wildlife sites</i> <i>c not adversely affect the integrity of European sites and be resisted where they have significant adverse impact on European or nationally designated sites or on the population or conservation status of a protected species or a priority species or habitat identified in a UK, London or appropriate regional BAP or borough BAP.</i> <i>D On Sites of Importance for Nature Conservation development proposals should:</i> <i>a give the highest protection to sites with existing or proposed international designations¹ (SACs, SPAs, Ramsar sites) and national designations² (SSSIs, NNRs) in line with the relevant EU and UK guidance and regulations³</i> <i>b give strong protection to sites of metropolitan importance for nature conservation (SMIs). These are sites jointly identified by the Mayor and boroughs as having strategic nature conservation importance</i> <i>c give sites of borough and local importance for nature conservation the level of protection commensurate with their importance.</i> <i>E When considering proposals that would affect directly, indirectly or cumulatively a site of recognised nature conservation interest, the following hierarchy will apply:</i> <i>1 avoid adverse impact to the biodiversity interest</i> <i>2 minimize impact and seek mitigation</i> <i>3 only in exceptional cases where the benefits of the proposal clearly outweigh the biodiversity impacts, seek appropriate compensation.</i> <i>LDF preparation</i> <i>F In their LDFs, Boroughs should:</i> <i>a use the procedures in the Mayor's Biodiversity Strategy to identify and secure the appropriate management of sites of borough and local importance for nature conservation in consultation with the London Wildlife Sites Board.</i> <i>b identify areas deficient in accessible wildlife sites and seek opportunities to address them</i> <i>c include policies and proposals for the protection of protected/ priority species and habitats and the enhancement of their populations and their extent via appropriate BAP targets</i> <i>d ensure sites of European or National Nature Conservation Importance are clearly identified</i> <i>e identify and protect and enhance corridors of movement, such as green corridors, that are of strategic importance in enabling species to colonise, re-colonise and move between sites."</i>
Haringey's Local Plan Strategic Policies 2013 – 2026	
SP13: Open Space and Biodiversity	<i>"New development shall protect and improve Haringey's parks and open spaces. All new development shall:</i> <i>▪ Protect and enhance, and when and where possible, extend the existing boundaries of the borough's Green Belt, designated Metropolitan Open Land, designated Open Spaces, Green</i>

Policy	Summary
	<i>Chains, allotments, river corridors and other open spaces from inappropriate development;</i> ▪ <i>Provide amenity space in accordance with the Council's Open Space and Recreational Standards Supplementary Planning Document (SPD);</i> ▪ <i>Manage the impact of such new developments in areas adjacent to designated open space;</i> ▪ <i>Secure improvements, enhancement and management in both quality and access to existing green spaces;</i> ▪ <i>Seek on-site or financial contributions towards open space from new developments as set out in the Open Space and Recreational Standards SPD;</i> ▪ <i>Seek to secure opportunities for additional publicly accessible open space especially in those identified areas of Open Space deficiency e.g. in the east of the borough where the quality and amount of provision is poorer as set out in the Council's Open Space and Recreational Standards SPD; and</i> ▪ <i>Conserve the historic significance of the borough's designated historic parks and gardens.</i> <i>All development shall protect and improve sites of biodiversity and nature conservation, including private gardens through its:</i> ▪ <i>Contribution to wildlife and ecological habitats and, where possible, include green and brown roofs, rainwater harvesting, green walls, bird and bat nesting/roosting opportunities;</i> ▪ <i>Protection, management and maintenance of existing trees and the planting of new trees where appropriate; and</i> ▪ <i>Protection, enhancement and creation of Sites of Importance for Nature Conservation (SINCs) and Local Nature Reserves (LNRs).</i> <i>The Council will enhance and improve the borough's green infrastructure through:</i> ▪ <i>Implementation of the Haringey Green Grid projects (such as Lordship Recreation Ground Improvements);</i> ▪ <i>Working with adjoining boroughs and partners to safeguard the existing Green Infrastructure, to create new green infrastructure and link up sites; and</i> ▪ <i>Working with Lee Valley Regional Park Authority to protect and enhance access to the park, its waterside open spaces and habitats, recreational and sporting facilities."</i>
Haringey's Local Plan: Tottenham Area Action Plan	
Policy AAP6: Urban Design and Character including Tall Buildings	<i>"I Where proposals fall within 500m of a Special Protection Area/ RAMSAR areas, specific measures should be set out to ensure there is no adverse effect on ecological integrity. Applicants are encouraged to engage with Natural England during pre-application discussions."</i>
Development Management DPD Haringey's Local Plan	
Policy DM19: Nature Conservation	<i>"A Development proposals on sites which are, or are adjacent to, internationally designated sites, Sites of Special Scientific Interest, Local Nature Reserves, Sites of Importance for Nature Conservation or Ecological Corridors, should protect and enhance the nature conservation value of the site.</i>

Policy	Summary
	<i>B Development that has a direct or indirect adverse impact upon important ecological assets, either individually or in combination with other development, will only be permitted where:</i> <i>a The harm cannot be reasonably avoided; and</i> <i>b It has been suitably demonstrated that appropriate mitigation can address the harm caused."</i>

Appendix C

Desk Study Information

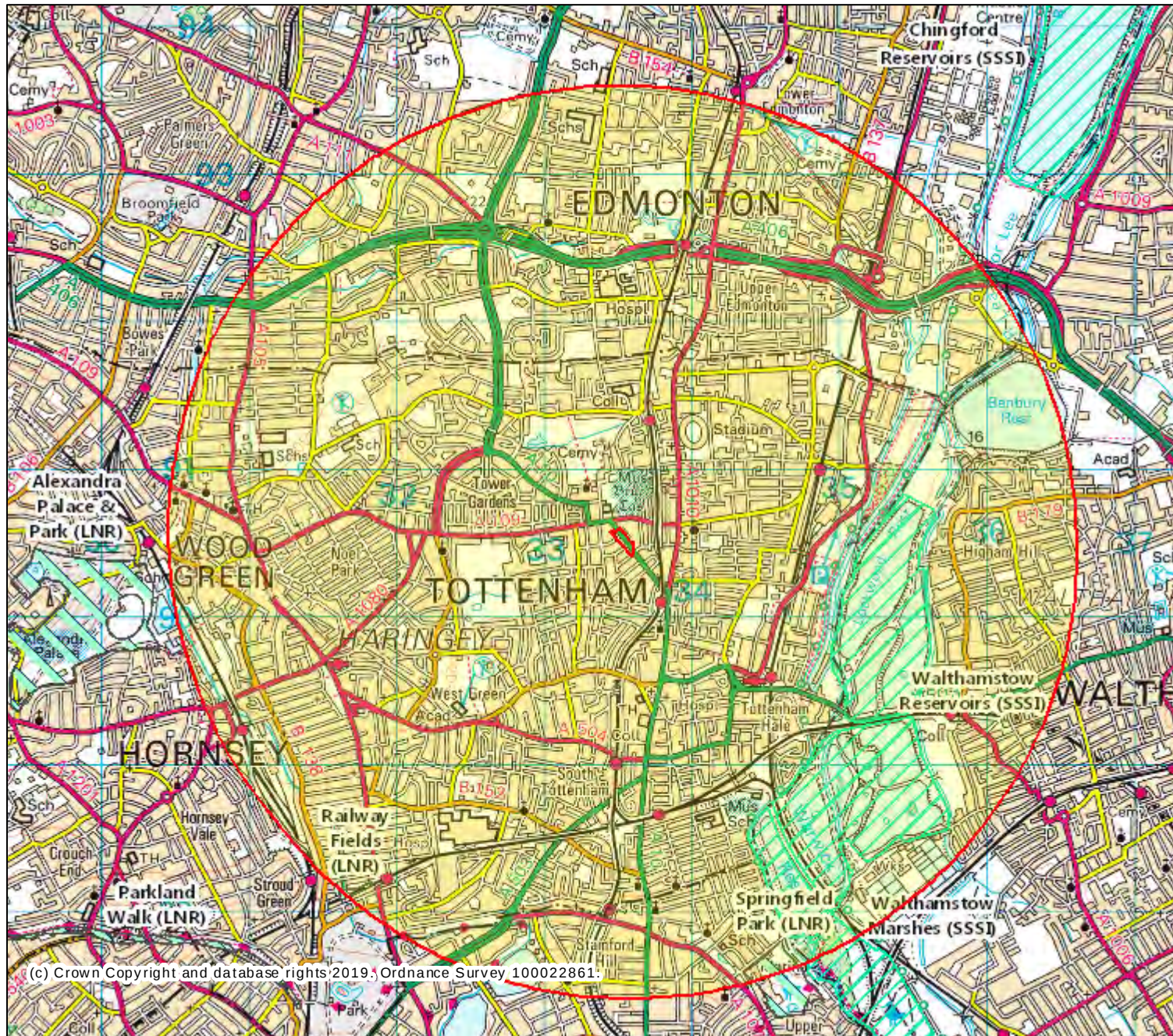
Local Nature Reserves (England)

Reference	1009350
Name	SPRINGFIELD PARK
Hectares	13.59
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Reference	1009092
Name	RAILWAY FIELDS
Hectares	0.87
Hyperlink	https://designatedsites.naturalengland.org.uk/SiteLNRDetail.aspx?SiteCode=L1009092

Sites of Special Scientific Interest (England)

Name	Walthamstow Marshes SSSI
Reference	1000343
Natural England Contact	LOUISE CROTHALL
Natural England Phone Number	0845 600 3078
Hectares	37.52
Citation	1003054
Hyperlink	http://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s1003054
Name	Walthamstow Reservoirs SSSI
Reference	1000135
Natural England Contact	LOUISE CROTHALL
Natural England Phone Number	0845 600 3078
Hectares	179.51
Citation	1004304
Hyperlink	http://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s1004304

National Nature Reserves (England)
No Features found



Legend

-  Local Nature Reserves (England)
-  National Nature Reserves (England)
-  Sites of Special Scientific Interest (England)

Projection = OSGB36

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ymin = 185300

xmax = 543500

ymax = 196000



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Ramsar Sites (England)

Name	LEE VALLEY
Reference	UK11034
Hectares	451.3

Special Areas of Conservation (England)

Name	EPPING FOREST
Reference	UK0012720
Hectares	1628.87
Hyperlink	http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?eucode=UK0012720

Special Protection Areas (England)

Name	LEE VALLEY
Reference	UK9012111
Hectares	451.3

Proposed Ramsar Sites (England)

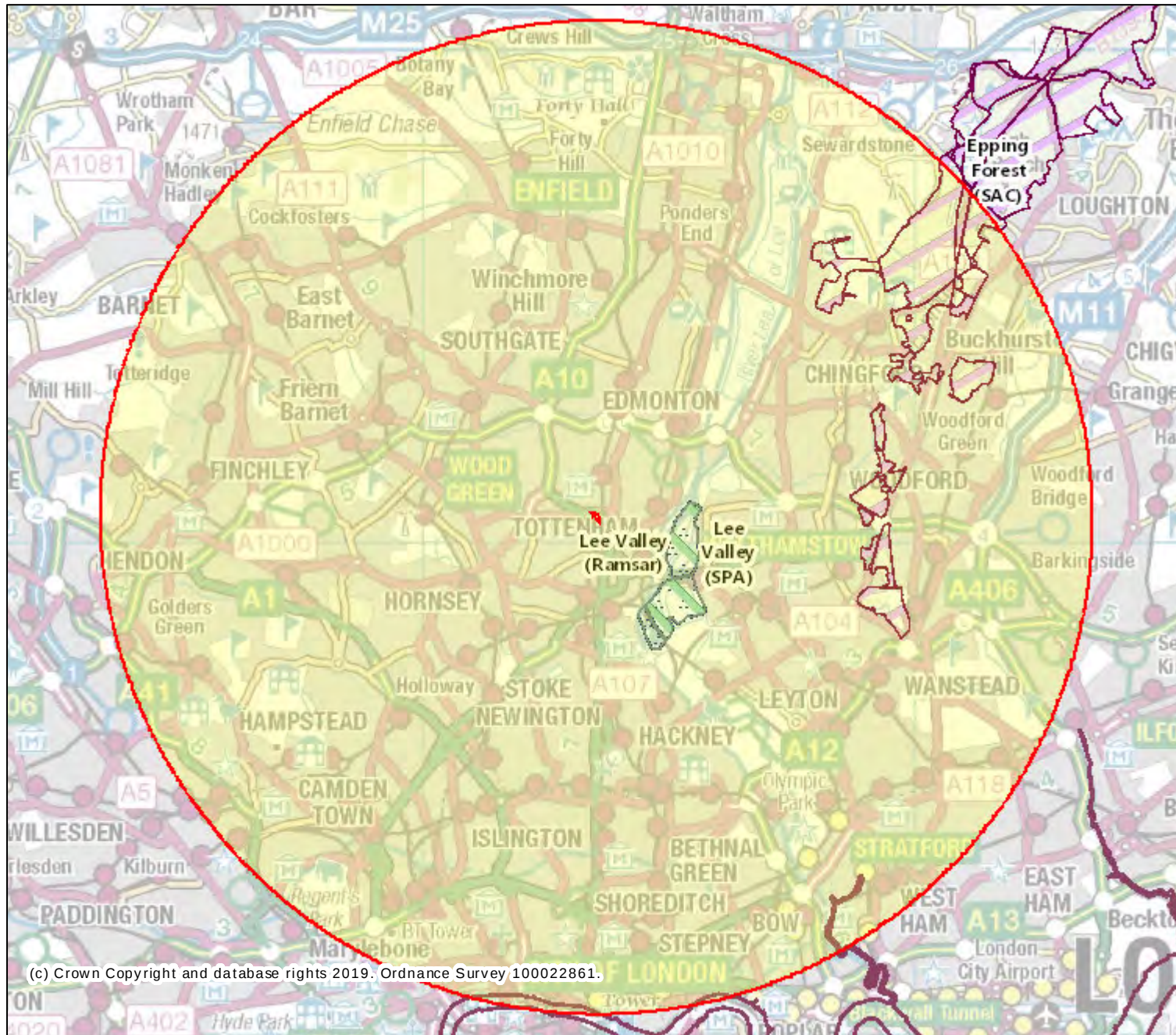
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Possible Special Areas of Conservation (England)

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Potential Special Protection Areas (England)

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Legend

-  Ramsar Sites (England)
-  Proposed Ramsar Sites (England)
-  Special Areas of Conservation (England)
-  Possible Special Areas of Conservation (England)
-  Special Protection Areas (England)
-  Potential Special Protection Areas (England)

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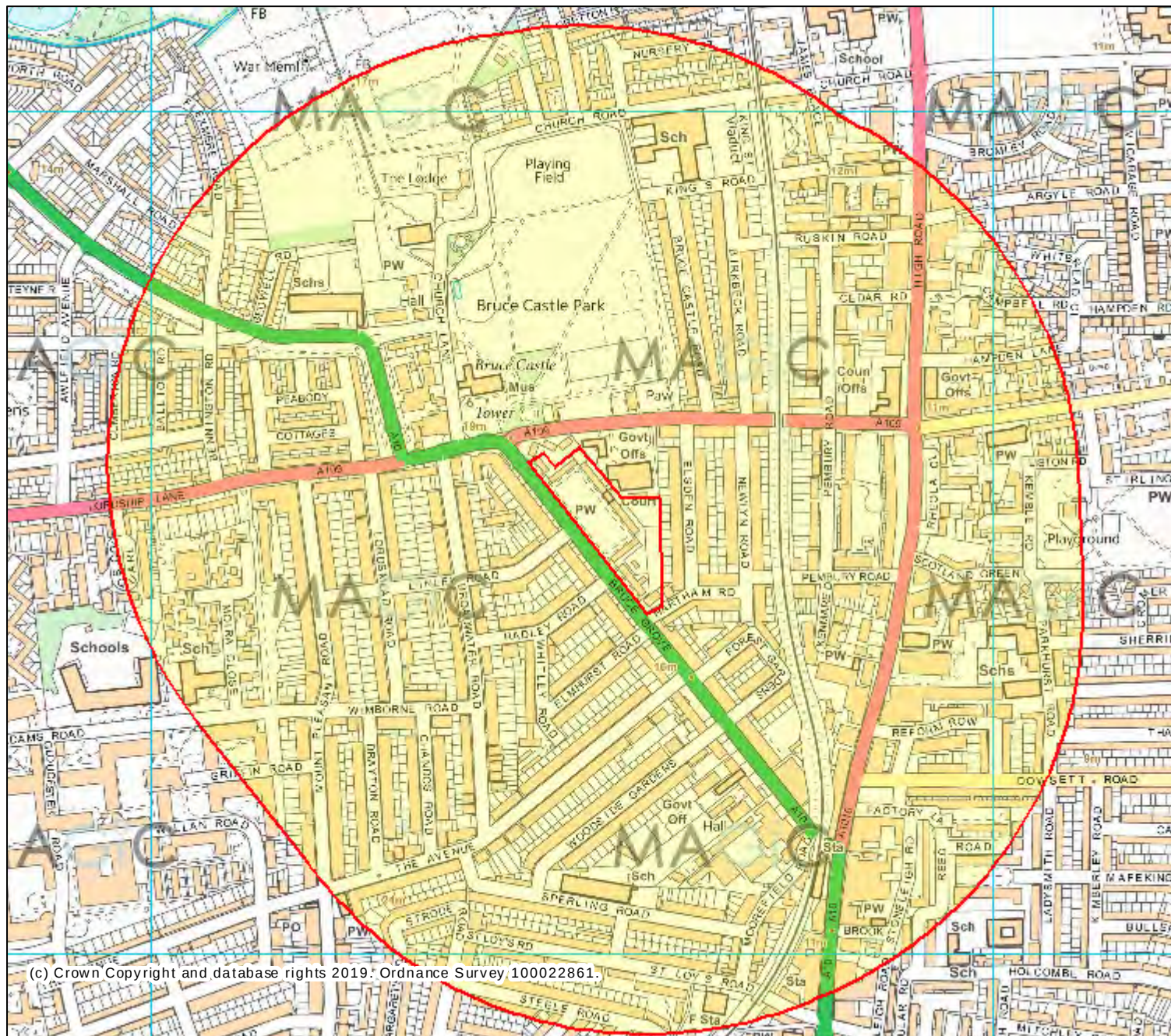
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Projection = OSGB36

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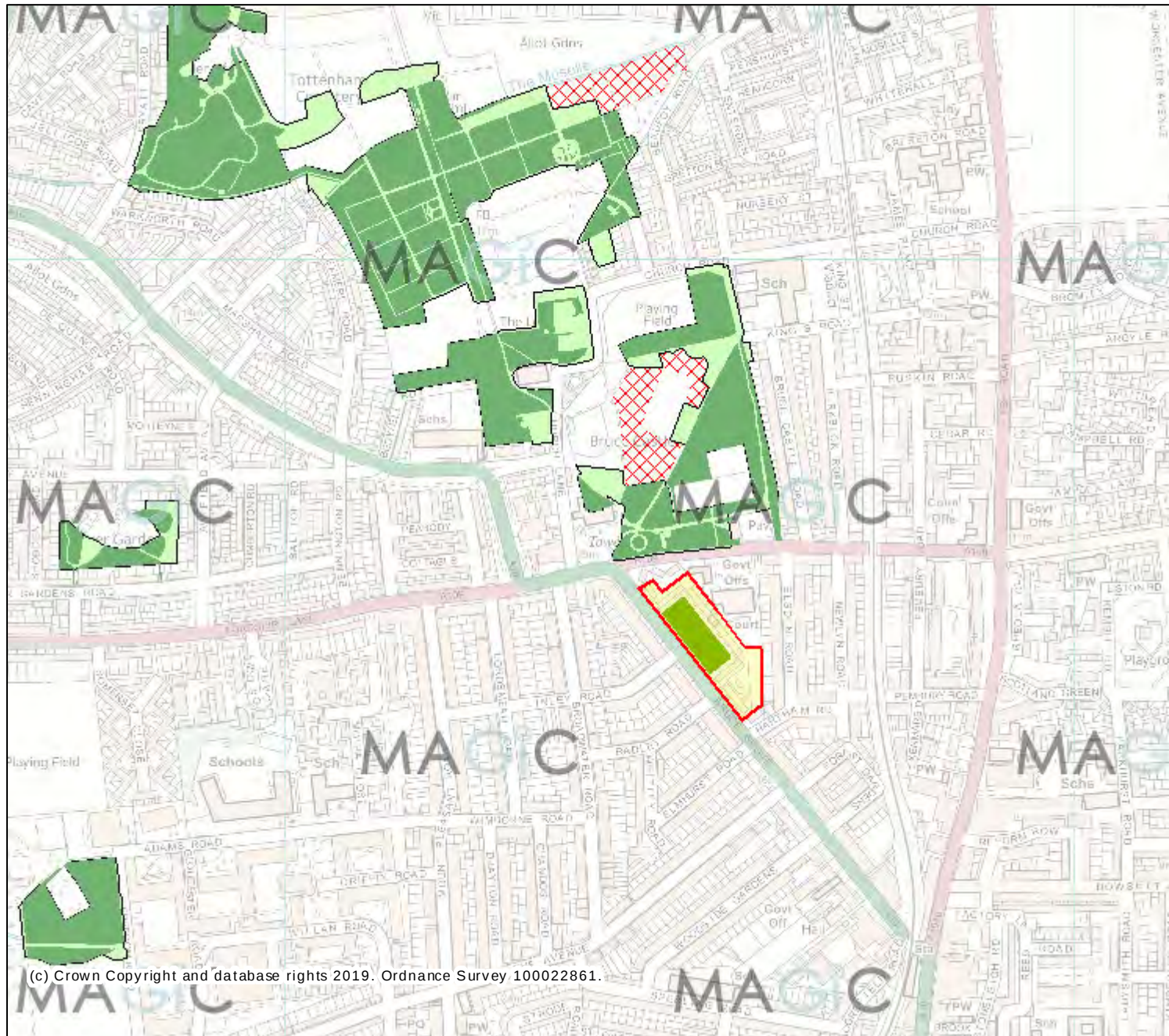
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Legend

Ancient Woodland (England)

Ancient and Semi-Natural Woodland

Ancient Replanted Woodland

Priority Habitat Inventory - Deciduous Woodland (England)

Forestry Commission Legal Boundary (England)

National Forest Inventory (GB)

Assumed woodland

Broadleaved

Cloud \ shadow

Conifer

Coppice

Coppice with standards

Failed

Felled

Ground prep

Low density

Mixed mainly broadleaved

Mixed mainly conifer

Shrub

Uncertain

Windthrow

Young trees

Priority Habitat Inventory - Traditional Orchards (England)

Priority Habitat Inventory - No main habitat but additional habitat exists (England)

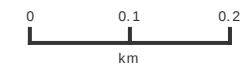
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Appendix D

Preliminary Bat Roost Assessment

Methods

The aim of the preliminary roost assessment is to assess the potential for, or any evidence of, the presence of roosting bats associated with specific habitat features. Where significant potential for roosting is identified, further bat roost surveys are generally necessary to determine the presence or likely absence of a roost, and to characterise any roost present. The method described below has been followed with due consideration for the current best practice guidelines (Collins, 2016).

Structures

A detailed inspection of the exterior of structures at the Site was undertaken to (i) identify and Potential Roost Features (PRFs) and potential bat ingress / egress points, and (ii) locate any evidence of bats such as live or dead specimens, droppings, urine splashes, fur-oil staining, feeding remains (e.g. moth wings) and/or squeaking noises. Equipment used included ladders, high-powered torches and close-focusing binoculars, as appropriate.

Where any droppings were present, samples were collected to enable species identification via DNA analysis, if required.

Trees – Ground Level Assessment

A detailed inspection of semi-mature and mature trees at the Site was undertaken from ground level to (i) identify PRFs such as rot holes, cavities and split limbs, and (ii) locate any evidence of bats such as live or dead specimens, bat droppings, urine splashes, fur-oil staining, feeding remains (e.g. moth wings) and/or squeaking noises. The inspections were carried out systematically around all parts of the tree, from all angles and from both close to the trunk and further away. Equipment used included a ladder, endoscope, high-powered torches and close-focusing binoculars, as appropriate.

Limitations

Several trees, likely to be considered off-site along the northern boundary were covered in dense ivy making any PRFs present unlikely to be seen.

Evaluation

Following the assessments, each structure and tree was assigned one of the following categories in respect of its potential to support roosting bats (adapted from Collins, 2016):

- *Negligible*: no obvious PRFs
- *Low*: a structure with one or more PRFs 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 by large numbers of bats. A tree of sufficient size and age to contain PRFs but none seen from the ground or features seen only with very limited roost potential.

- *Moderate* – a structure or tree with one or more PRFs 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.
- *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.

Results

Table D.1. Results of Preliminary Roost Assessment - Structures

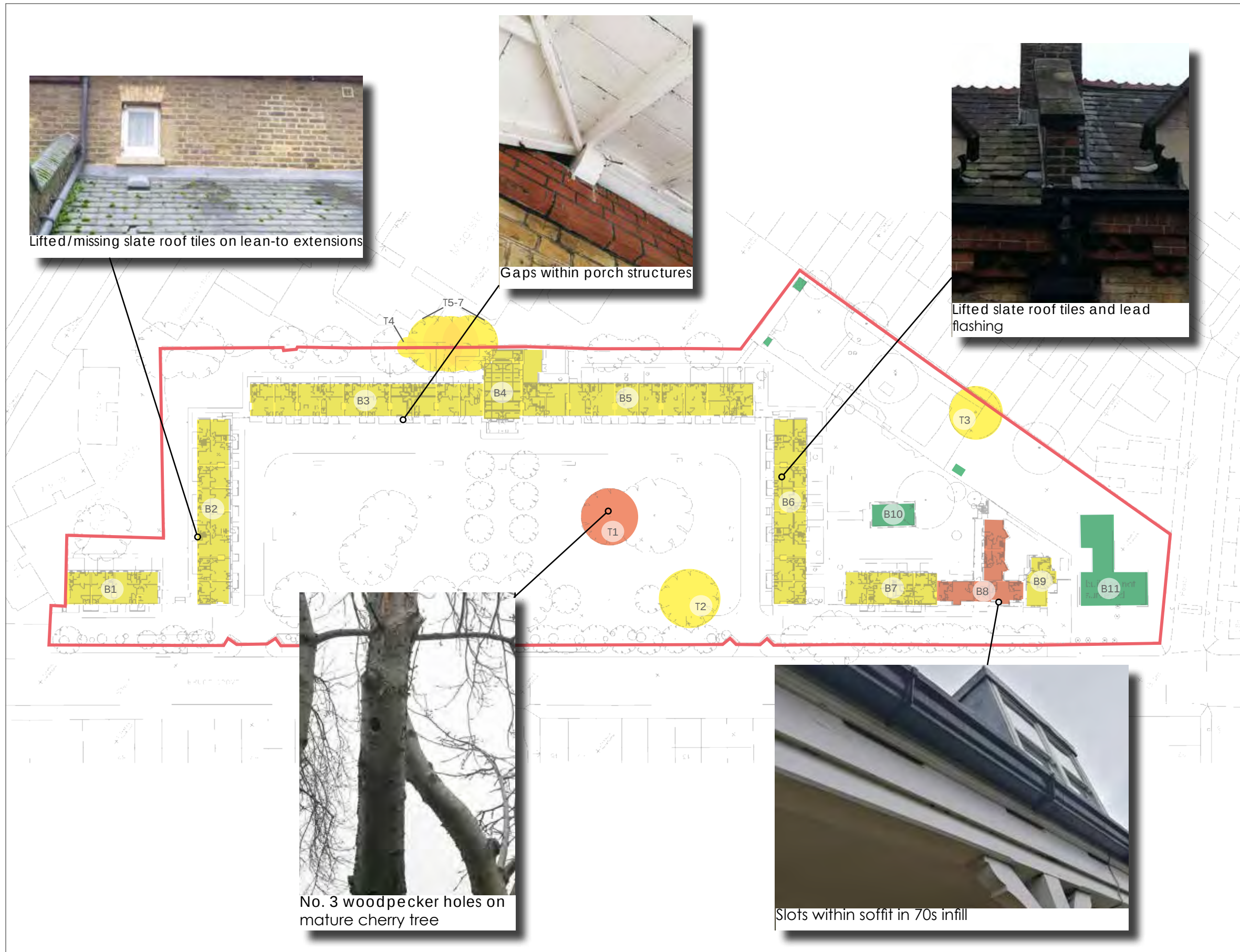
Building Ref.	Building Description	External Evidence /Features	Bat Roost Potential
B10	Single storey laundry building with pebble dash render and corrugated asbestos roof. In current use.	Gaps behind soffits however small narrow for bat access	Negligible
B11	Two storey detached brick built building with concrete tile roof tiles. uPVC windows and soffits. In current use.		Negligible
B1, 2, 3, 5, 6, 7, 9.	Terrace of brick-built 2 storey almshouses built in 1870. Double pitched, open gable roof lined with slate roof tiles with ornate clay ridge tiles. Brick chimney stacks and lead flashing where external walls/party walls meet the roof. Stone window sills and lintels, timber sash windows and timber doors. Timber framed porches to front elevations, also slate clad roofs with clay ridge tiles. Single storey brick built lean-to extensions to rear elevations with slate clad roof. Majority in current use.	Lifted lead flashing on hips and missing slates on porch roofs and lean-tos. Occasional lifted slates within main roof. Gaps between porch timbers and external wall.	Low
B4	Central chapel building. Same construction as terraced almshouses with slate clad roof with ornate clay roof tiles. Spire clad with slate tiles and lead flashing. Bird netting deployed under spire structure. In current use.	Gaps beneath lead flashing.	Low

Building Ref.	Building Description	External Evidence /Features	Bat Roost Potential
B8	70s infill T-shaped building between original almshouses understood to have been constructed between 1978 and 1981. Slate clad gabled overhanging mansard roof to the front and double pitched roof to rear elevations. Close fitting hanging slate tiles on mansard roof. Timber sash windows and timber soffit. In current use.	Purpose built slots within soffit along whole front elevation and within porches to the rear.	Moderate

Table D.2. Results of Preliminary Roost Assessment - Trees

Tree Ref.	Species	PRF	Height of PRF from ground level	Orientation of PRF in relation to trunk	Bat Roost Potential
T1	Cherry	No. 3 woodpecker holes in main trunk.	3m	North	Moderate
T2	Cherry	Lifted/loose bark	3m	North	Low
T3	Pear	Knot hole	4m	East	Low
T4	Dead horse chestnut	Lifted bark	NA	NA	Low
T5-7	Horse chestnut	Ivy clad	NA	NA	Likely to be at least Low*

*Located off-site and as such could not be fully assessed





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