

Ecological Impact Assessment Report



**The former Mary Feilding Guild Care Home,
103-107 North Hill, Highgate
8th December 2022**



**Tyler
Grange**

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Contents:

Summary	
Section 1: Introduction	1
Section 2: Methods	3
Section 3: Ecological Features and Evaluation	10
Section 4: Potential Impacts, Mitigation and Enhancements	20
Section 5: Biodiversity Net Gain Assessment	25
Section 6: Conclusions	28

Appendices:

Appendix 1: Relevant Legislation and Policy
Appendix 2: Bat Survey Results
Appendix 3: Illustrative Landscaping Plan

Plans:

13786/P01a: Habitat Features and Preliminary Bat Roost Assessment Plan
13786/P04: Emergence Survey Plan
13786/P05: Post-development Habitats Plan



Summary

- S.1. This Ecological Assessment Report has been prepared by Tyler Grange group Ltd on behalf of Highgate Care Ltd in relation to land at the former Mary Feilding Guild Care Home, 103-107 North Hill, Highgate hereafter referred to as 'the site'.
- S.2. The proposals are for demolition of existing buildings and redevelopment to provide a new care home (Class C2 - Residential Institution), together with a well-being and physiotherapy centre. The proposed care home includes up to 70 bedrooms, a hydrotherapy pool, steam room, sauna, gym, treatment/medical rooms, hairdressing and beauty salon, restaurant, cafe, lounge, bar, well-being shop, general shop, car and cycle parking, refuse/recycling storage, mechanical and electrical plant, landscaping and associated works. These proposals are hereafter referred to as 'the development'.
- S.3. No impacts on statutory or non-statutory designated sites are considered likely as a result of the development.
- S.4. Those habitats that are being lost to the development are predominately of negligible ecological importance and require no specific mitigation, such as buildings and hardstanding. Those habitats of ecological importance within the site that are proposed to be subject to habitat loss such as scattered trees will be more than mitigated for through proposed habitat creation. These enhancements will achieve a net gain of **+5.71%** habitat units. It is considered that these habitats will provide a range of nesting, foraging and commuting opportunities for protected and priority species such as bats, birds, reptiles, and west European hedgehog *Erinaceus europaeus*.
- S.5. A low conservation status bat roost comprising a single soprano pipistrelle *Pipistrellus pygmaeus* was identified in the former care home building (hereafter referred to as building B1). This should be protected from disturbance until it can be carefully removed under a licence (such as a Bat Low Impact Class Licence). An alternative roost such as a bat box should be provided in a location to be determined by the licenced ecologist.
- S.6. Any vegetation removal should be undertaken outside of the core nesting bird season (March-August, inclusive), otherwise, a pre-works check by an Ecological Clerk of Works (ECoW) should be undertaken to determine whether active birds' nests are present. If nest(s) are present, no nests, eggs or young should be destroyed and an appropriate buffer must be instated until the chicks have been confirmed as fledged by an ECoW.
- S.7. The mitigation and enhancement recommendations made within this report, such as the provision of bird and bat boxes, a sensitive lighting strategy in relation to bats and a long-term management plan to secure the ecological enhancements that are proposed as part of the development could be controlled by appropriately worded planning conditions.
- S.8. In conclusion, it is considered that the future development of the site would accord with relevant planning policy. The development seeks to enhance ecological features and the proposed mitigation and enhancement measures can be secured by appropriately worded planning conditions.



Section 1: Introduction

Introduction

- 1.1 This Ecological Assessment Report has been prepared by Tyler Grange Group Ltd on behalf of Highgate Care Ltd in relation to land at the former Mary Feilding Guild Care Home, 103-107 North Hill, Highgate, hereafter to as 'the site'. The site is centred on approximate Ordnance Survey (OS) grid reference TQ 27991 88183. The location and indicative extent of the site is shown by a red line in **Figure 1**.



Figure 1: Site location and extent
(Base mapping © Ordnance Survey 2021)

Context

- 1.2 The site primarily comprises hardstanding, amenity grassland, introduced shrub, and scattered trees. To the north and west the site is bordered by residential gardens. The site lies adjacent to roads to the east (North Hill, B519) and south (View Road). The wider landscape consists of primarily of the urban area of Highgate.
- 1.3 The proposals are for Demolition of existing buildings and redevelopment to provide a new care home (Class C2 - Residential Institution), together with a well-being and physiotherapy centre. The proposed care home includes up to 70 bedrooms, a hydrotherapy pool, steam room, sauna, gym, treatment/medical rooms, hairdressing and beauty salon, restaurant, cafe, lounge, bar, well-being shop, general shop, car and cycle parking, refuse/recycling storage, mechanical and electrical plant, landscaping and associated works. These proposals are hereafter referred to as 'the development'. It is understood that pre-application discussions regarding these proposals have been held with London Borough of Haringey who verbally confirmed acceptance of the scope of ecology works.



Purpose

- 1.4 The purpose of this report is to set out the ecological baseline of the site and present the findings of ecological surveys completed to date. This report:
- Uses available background data and results of field surveys, to describe and evaluate the ecological features associated with the proposed development;
 - Describes actual or potential ecological issues and opportunities that might arise as a result of the proposed development;
 - Where appropriate, makes recommendations for mitigation of adverse effects and ecological enhancement, to ensure conformity with policy and legislation;
 - Evaluates the proposals in terms of whether they will achieve a biodiversity net gain at the site; and
 - Can be used to inform a planning application for the site's redevelopment.
- 1.5 This assessment and the terminology used are consistent with the 'Guidelines for Ecological Impact Assessment in the UK and Ireland' published by the Chartered Institute of Ecology and Environmental Management (CIEEM) (CIEEM, 2018).



Section 2: Methods

Data search

- 2.1 The aim of the data search is to collate existing ecological records for the site and the surrounding area. Obtaining existing records is an important part of the assessment process as it provides information on issues that may not be apparent during a single survey, which provides only a 'snapshot' of the ecology of a given site.
- 2.2 Biological records of protected or notable species and non-statutory designated sites were purchased for within a 1km from the site from the Greenspace information service for Greater London (GiGL). Records were provided with grid references of varying degrees of accuracy and therefore records provide an indication of species presence in the area, and it is not possible to confirm species presence or likely absence within the site through these records alone. Only records returned from the last 10 years are considered relevant for the purposes of this assessment.
- 2.3 In addition, the following online resources were reviewed to supplement the biological records:
- The Multi-Agency Geographic Information for the Countryside (MAGIC) (Defra 2021) website was accessed for information on the location of statutory designated nature conservation sites within a 10km radius for European designated sites and a 1km search radius for nationally designated sites. Information regarding European Protected Species licence applications within 1km of the site was also reviewed; and
 - Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 for habitats and species of principle importance in England, subject to conservation action, to assist with the evaluation of ecological resources.
- 2.4 The following documents were reviewed for relevant local policy (detailed in **Appendix 1**):
- The London Plan 2021 (Greater London Authority 2021);
 - The London Biodiversity Action Plan (BAP) (GiGL 2021);
 - The Haringey Biodiversity Action Plan (Haringey Council 2009);
 - Haringey Local Plan which is currently made up of Strategic Policies (Haringey Council 2013), Development Management Policies (Haringey Council 2017) and Site Allocations documents and Tottenham Area Action Plan, alongside the London Plan 2021; and
 - Highgate Neighbourhood Plan (Highgate Neighbourhood Forum 2017).

Baseline assessment

Extended Phase 1 Habitat Survey

- 2.5 An extended Phase 1 Habitat survey was conducted on the 08th March 2021 by Daniel Lock, an experienced field ecologist and member of CIEEM. The methods used during the walkover survey



broadly followed methods used in an 'extended' Phase I habitat survey (Joint Nature Conservation Committee (JNCC) 2010). This technique provides an inventory of the habitat types present and dominant species. Note was taken of the more conspicuous fauna and any evidence of, or the potential for, the presence of protected notable flora and fauna.

- 2.6 The weather conditions for the survey were dry, with 70% cloud cover, light winds and a temperature of approximately 9°C.

Preliminary Bat Roost Assessment

- 2.7 A Preliminary Bat Roost Assessment (PBRA) of the structures and trees present within the site was completed in conjunction with extended Phase 1 habitat survey on 08th March 2021. The PBRA aimed to assess the suitability of trees and buildings within the site to support roosting bats. This survey was undertaken alongside the 'extended' Phase I habitat survey. The surveys followed standard methodologies (Mitchel-Jones, A. J., 2004, Mitchell- Jones, A.J. and McLeish, A.P., 2004 Collins, 2016) which are described below.
- 2.8 The PBRA for structures comprised a ground-level external inspection of all buildings present within the site to assess their potential to support roosting bats. In summary, this entailed the following:
- A ground level visual inspection of the exterior of the structures within the site, examining features such as brickwork, cladding, and roofs for evidence of, or potential use by, bats including the presence of bat droppings, feeding remains, staining from fur-oil or urine, or even bats themselves; and
 - Consideration of a number of factors including the presence or absence of features suitable for use by crevice dwelling bats, proximity to foraging habitats or cover, and potential for disturbance from lighting and other sources.
- 2.9 The PBRA of trees comprised a ground level inspection of all trees within the site to determine the respective suitability of each tree for roosting bats. Potential Roost Features (PRFs) that may be used by bats, as defined within the Bat Conservation Trust (BCT) best practice guidelines (Collins, 2016), were sought. Types of PRF may include the following:
- Woodpecker holes, rot holes, knot holes arising from naturally shed branches and man-made holes;
 - Hazard beams and other vertical or horizontal cracks and splits (such as frost-cracks or 'tear outs') in stems or branches;
 - Partially detached, 'platey' bark;
 - Cankers;
 - Other hollows or cavities, including butt-rots;
 - Partially detached ivy with stem diameters in excess of 50mm; and
 - Bird, bat or dormouse boxes.



2.10 Evidence of the presence of bat roosts was also sought. These signs included:

- Presence of bats;
- Bat droppings in, around or below a PRF;
- Odour emanating from a PRF; and
- Visible staining below a PRF.

2.11 The potential for structures and trees at the site to support roosting bats has been categorised against the criteria described in **Table 2.1**.

Table 2.1: Roost Assessment Criteria (adapted from Collins, 2016)

Suitability	Description of Roosting Habitats
Negligible	Negligible habitat features 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 numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features are 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.
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 long periods of time due to their size, shelter, protection, conditions and surrounding habitat.

Habitat Suitability Index Assessment

2.12 A Habitat Suitability Index (HSI) assessment of ponds within the site was completed in conjunction with extended Phase 1 habitat survey on 08th March 2021. HSI assessment aims to identify the suitability of waterbodies for great crested newt *Triturus cristatus*. HSI assessment would typically consider ponds within 250m of a development site which are not separated by significant barriers to GCN dispersal such as motorways and fast-flowing water. A desk-based study using Defra's MAGIC mapping (Defra 2021) identified no waterbodies within 250m of the site and therefore HSI assessment was completed within the site boundary only.

2.13 The HSI assessment was completed in accordance with published guidance (ARG UK 2010). Results were confirmed with a GCN licenced ecologist.

2.14 Waterbodies were assessed for their suitability to support great crested newt, in accordance with best practice guidelines on HSI assessment. The following ten key variables were assessed which are known to influence breeding populations of great crested newt:

- Geographic location;
- Water body area;



- Water body permanence;
- Water quality;
- Water body shading;
- Impact of waterfowl;
- Fish stocks;
- Number of waterbodies within 1km;
- Terrestrial habitat around the water body; and
- Macrophyte cover of the water body.

2.15 Waterbodies were scored on the above variables which were then used to calculate an overall HSI for each waterbody. Waterbodies were then assigned to one of the following five categories: poor, below average, average, good or excellent.

2.16 The HSI classifications are provided below:

- < 0.5 Poor;
- 0.5 – 0.59 Below Average;
- 0.6 – 0.69 Average;
- 0.7 – 0.79 Good; and
- ≥ 0.8 Excellent.

2.17 Although the HSI cannot be used as confirmation of GCN presence or likely absence, it can be used as a guide to assess waterbodies in terms of their potential to support GCN

Phase 2 species surveys

Bats: Emergence surveys

2.18 Emergence surveys were completed for the buildings and followed standard methodologies (Collins, 2016 and Mitchell-Jones, A. J., 2004,).

2.19 The emergence surveys aimed to identify bats emerging from or returning to roost. The level of survey effort employed was proportional to the roost suitability assigned during PBRA, in accordance with best practice guidelines (Collins 2016), as shown in **Table 2.2** below. Surveyor locations were utilised to fully cover the potential roosting features on the buildings (shown on the Emergence Survey Plan (ref: **13786/P04**).



Table 2.2: Emergence/Re-entry survey requirements (adapted from BCT guidelines, Collins 2016)

Suitability	Survey requirements
Negligible	Structures and trees: No emergence/re-entry survey required
Low	Structures: One survey visit; either a dusk emergence or a pre-dawn re-entry survey between May and August. Trees: No further surveys required.
Moderate	Structures and trees: Two separate survey visits: one emergence and one re-entry. Surveys should be completed between May and September, with at least one survey between May and August.
High	Structures and trees: Three separate survey visits: at least one emergence and one re-entry with the third visit either emergence or re-entry. Surveys should be completed between May and September, with at least two surveys between May and August.

2.20 Emergence surveys were completed on 23rd August 2021, 15th September 2021 and 29th September 2021. It was not possible to complete two surveys before the end of August due to project timescales. See 'Assumptions and limitations' for further details.

2.21 The dusk emergence surveys began 15 minutes before sunset and continued until at least 90 minutes after sunset. All surveys were completed at dusk, see 'Assumptions and limitations' below for further details.

2.22 The surveyors used Elekon Batlogger, Echometer Touch, Anabat and Peersonic bat detectors to listen to and record echolocation calls of bats observed.

2.23 During each survey visit, surveyors mapped the flight-lines used by any bats observed and noted whether bats were seen to exit or enter the tree. Incidental records of bat activity near the surveyor locations were also collected.

2.24 **Bats: Aerial inspection surveys**

2.25 The trees identified during the PBRA were each subject to aerial inspection surveys in place of emergence surveys where accessible. Aerial inspection survey effort therefore reflected each tree's respective suitability, as described for emergence surveys in **table 2.4**.

2.26 Aerial tree inspections are considered to be an effective survey method (Collins 2016) in determining the presence or likely absence of bat roosts, providing all PRFs can be inspected.

2.27 The aerial inspections were completed on 25th-26th August 2021, 16th September 2021 and 29th September 2021 by MKA Ecology Ltd. All survey visits were completed during daylight hours by a holder of a level two bat class licence. The aerial inspection involved the use of a ladder and tree climbing equipment along with an endoscope to visually inspect PRFs on each tree for evidence of roosting bats including:

- Presence of bats;
- Bat droppings in, around or below a potential roost feature (PRF);
- Odour emanating from a PRF; and



- Visible staining below a PRF.

Evaluation

- 2.28 The evaluation of habitats and species is defined in accordance with published guidance (CIEEM, 2018). The level of importance of specific ecological features is assigned using a geographic frame of reference, with international being most important, then national, regional, county, borough and local.
- 2.29 Evaluation is based on various characteristics that can be used to identify ecological features likely to be important in terms of biodiversity. These include site designations (such as Sites of Species Scientific Interest (SSSIs), or for undesignated features, the size, conservation status (locally, nationally or internationally), and the quality of the ecological feature. In terms of the latter, quality can refer to habitats (for instance if they are particularly diverse, or a good example of a specific habitat type), other features (such as wildlife corridors or mosaics of habitats) or species populations or assemblages.

Biodiversity Net Gain

- 2.30 The DEFRA Biodiversity Metric 3.0 was utilised to calculate the pre-development and predicted post development biodiversity value of the site based on the Illustrative Landscaping Plan produced by Guarda (reference: 21069-GUA-DR-L-001 P04) as shown in **Appendix 3. Section 5** of this report should be read alongside the completed DEFRA 3.0 metric (ref: **13786/BNG**).
- 2.31 The Biodiversity Metric 3.0 metric operates by calculating the number of biodiversity units associated with a particular habitat type (both pre-and post-development) – the ‘unit’ value associated with each habitat type is calculated based on the following parameters:
- Size (in hectares)/Length (in km);
 - Distinctiveness (i.e. how rare/valuable a given habitat is);
 - Condition (i.e. how well the recorded habitat fits [or will fit] the standardised description of that habitat); and
 - Strategic significance (i.e. if the existing or proposed habitat is within an area formally adopted in the local plan for green infrastructure or biodiversity improvements).
- 2.32 When considering the creation of new habitats in the post-development site, other factors are also considered when calculating the ‘unit’ value of a given habitat and these are:
- Time to reach the target condition of each habitat; and
 - Difficulty category for the creation of a given habitat.
- 2.33 A calculation has been undertaken using the baseline habitats identified during the ‘extended’ Phase I habitat survey and created/enhanced habitats taken from the Illustrative Landscaping plan (**Appendix 3**). The UK Habitat Classification (Butcher *et al.* 2020) was used to identify habitat



types based on the results of the 'extended' Phase I habitat Survey. A number of assumptions were made which are detailed within **Section 5** of this report, and the BNG Metric (ref: **13786/BNG**).

- 2.34 Note that the calculation is completed separately for non-linear and linear habitats.
- 2.35 Habitat areas are entered into the Defra 3.0 metric in hectares and are rounded to two decimal places. Therefore, habitats smaller than 0.05 hectares are not entered into the metric.

Limitations

- 2.36 Owing to the timing of the extended Phase 1 habitat survey, some plant species may not have been visible. This may have a minor impact on the classification of habitat areas at the site. Although this survey was completed at a sub-optimal time for flowering plants, given the type of habitats present, it is considered that the majority of species would be visible at this time. Therefore, this limitation is not considered likely to affect the conclusions of this report.
- 2.37 Due to project timescales, it was not possible to complete two bat emergence surveys between May and August as recommended by best practice guidelines (Collins 2016). Two of the three surveys were completed in September. Furthermore, given that two of the three surveys had to be completed in September, all three surveys were emergence conducted at dusk to align with best practice guidance on timing of emergence/re-entry surveys in autumn, which are best completed as dusk emergence rather than dawn re-entry surveys (Collins 2016). Given the sub-optimal weather experienced in the early part of the season and the more favourable weather experienced in September, in addition to bats being recorded as active for all three surveys, these deviations from best practice methods are not considered to be a constraint on the conclusions of this assessment.

Quality Control

- 2.38 All ecologists at Tyler Grange Group Limited are members or qualifying members of CIEEM and abide by the Institute's Code of Professional Conduct.



Section 3: Ecological Features and Evaluation

Designated sites

Statutory designated sites

- 3.1. Two European statutory designated nature conservation sites (Ramsar sites and Special Protection Areas (SPAs)) were identified within 10km of the site boundary. European Sites have been established under the European Council Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna, 1992, often referred to as the 'Habitats Directive'. These sites are designated for the protection of core breeding and resting sites for rare and threatened species, and some rare natural habitat types across Europe and are therefore considered to be of international ecological importance.
- 3.2. Three national statutory designated sites (Sites of Special Scientific Interest (SSSIs) and Local Nature Reserves (LNRs)) were identified within 1km of the site. SSSI's are designated under national legislation, namely the Wildlife and Countryside Act 1981, as amended, to protect sites which contain flora or fauna of national value and are therefore considered to be of national ecological importance. Local Nature Reserves are typically designated for containing habitats or species of importance on a more local scale and are therefore typically of up to District ecological importance.
- 3.3. Details of statutory designated sites are provided in **Table 3.1** below.



Table 3.1: Statutory designated sites within the search area

Designation	Designated site name	Approximate Distance and orientation from the site	Reasons for designation	Ecological Importance
European sites:				
European Statutory	Lee Valley Ramsar	6.35km south	Qualifying under Ramsar Criterion 2 for supporting the nationally scarce whorled water-milfoil <i>Myriophyllum verticillatum</i> and the rare or vulnerable invertebrate <i>Micronecta minutissima</i> (a water-boatman) and Ramsar criterion 6 for supporting northern shoveler and gadwall (JNCC 2000).	International
European Statutory	Lee Valley SPA	6.35km south	Qualifying under Article 4.1 for supporting over-wintering bittern <i>Botaurus stellaris</i> and Article 4.2 for supporting over-wintering gadwall <i>Anas strepera</i> and northern shoveler (JNCC 2015) <i>Anas clypeata</i>	International
National sites:				
National Statutory	Queens Wood LNR	0.54km east	Ancient semi-natural woodland habitat. Used for recreation and environmental education.	National
National Statutory	Parkland Walk LNR	0.72km south east	Disused railway managed as Natural Conservation Area, containing woodland, scrub and grassland.	Up to District
National Statutory	Hampstead Heath Woods SSSI	0.96km south west	Woodlands with abundance of mature trees providing dead wood habitat for invertebrates, including the jewel beetle <i>Agrilus pannonicus</i> . A small valley adjacent to the woodland contains an acidic flush.	Up to District



- 3.4. The site falls within the Impact Risk Zone (IRZ) for Hampstead Heath Woods SSSI. However, the development is not known to meet any of the criteria set out by Natural England (Defra 2021) for potential effects on the SSSI (such as liquid waste discharge of more than 20m³ per day) and therefore this is discussed no further within this report.

Non-statutory designated sites

- 3.5. In London, non-statutory sites designated for their biodiversity importance are known as Sites of Importance for Nature Conservation (SINCs). SINCs are recognised by the Greater London Authority and London Borough Councils as important wildlife sites. SINCs are broken down into three tiers dependent on the geographic scale at which they are of importance, and these are, from most to least important:
- Sites of Metropolitan Importance;
 - Sites of Borough Importance (borough grade I and borough grade II); and
 - Sites of Local Importance.
- 3.6. SINCS are selected on the basis that they meet the criteria for local wildlife sites selection for sites of importance. Metropolitan SINCs are therefore of county ecological importance, Borough SINCs are of borough ecological importance and Local SINCs are of local ecological importance. They do not receive statutory protection but are protected from damage and development by local and national planning policy (see **Appendix 1**).
- 3.7. Eight SINCs were identified within 1km of the site. Details of these non-statutory sites are shown in **Table 3.2** below.



Table 3.2: Non-statutory designated sites within the search area

Designated site name and type	Approximate Distance and orientation from the site	Description	Ecological Importance
Yeatman Road Allotments Local SINC	0.18km west	Allotments with grassland and scrub that support slow worm and grass snake.	Local
Parkland Walk, Queen's Wood and Highgate Wood Metropolitan SINC	0.48km north east	Extensive woodland, containing ancient woodland, with scrub and grassland also present. The site supports breeding birds and is important for bats.	County
Southwood Lane Wood Local SINC	0.50km south east	Narrow strip of woodland surrounding a housing estate, dominated by sycamore <i>Acer pseudoplatanus</i> .	Local
Highgate Golf Course Borough Grade II SINC	0.68km west	Private golf course with moderately diverse grassland and a small woodland.	Borough
Harrington Site Local SINC	0.9km south east	Community horticulture project with adjacent developing woodland consisting of native and non-native trees, shrubs and woodland flowers.	Local
Cherry Tree Wood Local SINC	0.95km north west	Fragment of ancient woodland. Supports woodland flowers and birds, including mistle thrush <i>Turdus viscivorus</i> in open lawns.	Local
Fitzroy Park Allotments Borough Grade II SINC	0.99km south	Large allotment site with a variety of habitats, including grassland, dense scrub and several small ponds. Mature are present along perimeter.	Borough
Fortis Green Covered Reservoir and Central Foundation Playing Field Borough Grade II SINC	1km north	A covered reservoir that is intermittently grazed. Mature native and non-native trees and areas of scrub at margins provide habitat for birds.	Borough

Habitats and flora

- 3.8. The habitats recorded within the site are summarised below in **Table 3.3**, along with a description of the composition of the main plant species present and an assessment of their ecological importance.
- 3.9. The location of the habitats presented below are shown on the Habitats Features and Preliminary Bat Roost Assessment Plan (**13786/P01a**).



Table 3.3: Baseline habitats and Flora

Features	Description	Ecological Importance
Buildings	A large building (hereafter building B1) formed of inter-connected brick-built buildings of both single and two-storey structures forms the majority of the site. Three small structures (hereafter buildings B2, B3 and B4) are present in the grounds of the care home, comprising a small summer house structure and timber sheds.	Buildings are of no inherent ecological value and so are considered to be of negligible ecological importance.
Hardstanding	Hardstanding surrounds the buildings within the site, forming walkways and parking.	Hardstanding is of no inherent ecological value and so is considered to be of negligible ecological importance.
Bare Ground	A small area of bare ground is present in the north west corner of the site. This area was primarily covered by a mound of garden waste (TN1 on the Habitat Features and PBRA Plan 13786/P01a).	Bare ground is of no inherent ecological value and so is considered to be of negligible ecological importance.
Introduced Shrub	Introduced shrub was present on the northern, western and southern boundaries of the site. Species recorded include; bamboo <i>Phyllostachys aurea</i> , Japanese laurel <i>Aucuba japonica</i> , Mexican orange-blossom <i>Choisya ternatei</i> , Japanese photinia <i>Photinia glabra</i> , Oregon Grape <i>Mahonia aquifolium</i> and Kohuhu <i>Pittosporum tenuifolium</i> .	This habitat type is comprised of non-native ornamental species and is very common in the wider landscape. This habitat type is considered to be of negligible ecological importance.
Dense scrub	A small strip of dense scrub was recorded along the northern boundary of the site, primarily comprised of bramble <i>Rubus fruticosus</i> and nettle <i>Urtica dioica</i> .	Dense scrub habitat is common in the wider landscape and this is a very small area (less than 0.01ha) with limited species diversity and is considered to be of negligible ecological importance.
Amenity grassland	The majority of the grounds in the west and south of the site were formed of amenity grassland. This habitat type was dominated by perennial ryegrass <i>Lolium perenne</i> , maintained to a short sward length, with common daisy <i>Bellis perennis</i> , broadleaved plantain <i>Plantago major</i> , white-leaf clover <i>Trifolium repens</i> and round-leaved crane's-bill <i>Geranium rotundifolium</i> .	This habitat type is very common in the wider landscape and as such is considered to be of negligible ecological importance.
Scattered trees	Several scattered broadleaved trees were present within the site and just outside the northern and western boundaries. Species included hornbeam <i>Carpinus betulus</i> , London Plane <i>Platanus x hispanica</i> , Norway maple <i>Acer platanoides</i> and silver birch <i>Betula pendula</i> .	These tree species are common and widespread in the wider landscape, and as such are considered to be of up to local ecological importance.
Pond (hereafter referred to as Pond P1)	A single small (less than 5m ²) man-made ornamental pond was recorded in the south of the site. The pond was partially covered in duckweed <i>Lemna</i> sp. and had steep concrete banks and sides. Given the nature of the pond, it is considered unlikely to meet the criteria of a pond Habitat of Principal Importance (HoPI) (JNCC 2008).	The pond is sub-optimal for plants, invertebrates and other species to utilise. However, as no other ponds were identified within 250m of the site (see paragraph 2.17), the pond is assumed to be of up to local ecological importance.



Protected and Priority Fauna

- 3.10. Habitats within the site may offer opportunities for the following species groups. Species which are considered likely absent from the site based on professional judgement, following consideration the of habitats within the site, signs of species presence at the time of survey and data search records, are not discussed.

Amphibians

- 3.11. The data search returned records of common toad *Bufo bufo* within the 1km search area with the latest record from 2011 located approximately 0.69km south east of the site.
- 3.12. No records of great crested newt *Triturus cristatus* were returned from the data search.
- 3.13. One pond, Pond P1, was identified within the site. The pond was largely covered in duckweed and was of concrete construction with steep-sided banks. A Habitat Suitability Index assessment was completed on this pond to assess the suitability of the pond for great crested newt and the pond was found to be of 'poor' suitability. Results are shown in **table 3.4**.

Table 3.4: HSI assessment results Pond P1

Suitability Index (SI) Description	Suitability Index Value
Geographic location	1
Pond area	0.05
Pond permanence	0.9
Water quality	0.67
Shade	1
Water fowl effect	1
Fish presence	1
Pond Density	0.1
Terrestrial habitat	0.33
Macrophyte cover	0.6
HSI Score	0.48
Pond suitability (see below)	Poor

Bats

- 3.14. The data search returned records of six species of bat within 1km of the site: Daubenton's bat *Myotis daubentonii*, Natterer's bat *Myotis nattereri*, Leisler's bat *Nyctalus leisleri*, Noctule *Nyctalus noctula*, Nathusius' pipistrelle *Pipistrellus nathusii*, common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus* and brown long-eared bat *Plecotus auritus*.



in addition to records of *Plecotus*, *Myotis* and *Nyctalus* species not identified to species level. The closest records to the site were of Daubenton's, Natterer's, noctule and common pipistrelle, all located approximately 0.28km north east of the site. No records of European protected species mitigation licences issued for bat roosts were identified within the 1km search area.

- 3.15. The trees and scrub within and adjacent to the site offer limited foraging opportunities for bats and the majority of habitats within the site are sub-optimal habitat for foraging and commuting bats.

Preliminary Bat Roost Assessment

- 3.16. A ground-level external PBRA of four structures (buildings B1, B2, B3 and B4) and 33 trees (hereafter, trees T1-T33) within and adjacent to the site was completed. The results of the PBRA are summarised in **Table 3.5** below and detailed in **Appendix 2**. The location of all trees and buildings subject to PBRA and the PRFs of buildings are displayed on the Habitats Features and Preliminary Bat Roost Assessment Plan (**13786/P01a**).

Table 3.5: PBRA results

Tree/Building number	Tree species/ Building type	Suitability for roosting bats	Location relative to the site
Trees:			
T1	Beech	Low	Within the site
T2	London Plane	Moderate	Adjacent to the site
T3	Norway maple	Negligible	Adjacent to the site
T4	London Plane	Moderate	Adjacent to the site
T5	London Plane	High	Adjacent to the site
T6	English Laurel <i>Prunus Laurocerasus</i>	Moderate	Adjacent to the site
T7	Holly <i>Ilex aquifolium</i>	Negligible	Within the site
T8	London Plane	Negligible	Adjacent to the site
T9	London Plane	Moderate	Adjacent to the site
T11	London Plane	High	Adjacent to the site
T12	London Plane	Low	Adjacent to the site
T13	London Plane	High	Within a private property adjacent to the site
T15	Apple sp.	Moderate	Within the site
T16	Hazel <i>Corylus avellana</i>	Moderate	Adjacent to the site
T17-28	Lime <i>Tilia x europaea</i>	Negligible	Adjacent to the site
T29	Sycamore <i>Acer pseudoplatanus</i>	Negligible	Within the site
T30	Sycamore	Negligible	Within the site
T31	Silver birch	Negligible	Within the site
T32	Norway maple	Negligible	Within the site
T33	Norway maple	Negligible	Within the site
Buildings:			
B1	Former care home building of brick construction with pitched and flat roof sections	High	Within the site
B2	Garden summer house of wooden construction with pitched tiled roof	Negligible	Within the site
B3	Timber shed with flat felt roof	Negligible	Within the site
B4	Timber shed with flat felt roof	Negligible	Within the site



- 3.17. Trees and buildings containing no visible PRFs (Buildings B2, B3 and B4 and trees T3, T7, T8, T10, T14 and T17-32) are considered to be of negligible suitability for roosting bats and are discussed no further within this report.

Emergence surveys

- 3.18. Building B1 was found to be of high suitability for roosting bats and therefore was subject to three emergence surveys.
- 3.19. Survey results are summarised in **Table 3.6** below and are provided in detail in **Appendix 2**. Each survey visit was completed by five surveyors, positioned to obtain a view of all PRFs on the building. Surveyor locations are shown on the Emergence Survey Plan (ref: **13786/P04**).

Table 3.6: Emergence survey results

Survey date	Survey type	Bat roost suspected/confirmed (Yes/No)	Notes
23rd August 2021	Dusk emergence	No	No emergence observed. General activity recorded from common pipistrelle and soprano pipistrelle commuting and foraging.
15th September 2021	Dusk emergence	Yes	Likely emergence from a single soprano pipistrelle at 19:52 observed at location E1 as shown on the Emergence Survey Plan (13786/P04). General activity recorded from noctule, soprano pipistrelle and common pipistrelle, commuting and foraging.
29th September 2021	Dusk emergence	Yes	Likely emergence from a single soprano pipistrelle at 19:15 observed in the same location as 15 th September, at E1 as shown on the Emergence Survey Plan (13786/P04). General activity recorded from noctule, soprano pipistrelle and common pipistrelle, commuting and foraging

- 3.20. Given one individual soprano pipistrelle bat was observed to emerge from Building B1 on both the second and third survey visits and this occurred just after sunset on both occasions, it is concluded that a day roost of a low number of a common and widespread species (low conservation significance in best practice guidance (Mitchell-Jones 2004)) is present within Building B1. On both occasions a single soprano pipistrelle was observed flying away from location E1 as identified on the Emergence Survey Plan (ref: **13786/P04**). It was not possible to identify a specific PRF that the bat emerged from, although, due to the height of the building, a PRF may have been obscured from view by a chimney stack at this location. Mitigation and licensing requirements are discussed in **Section 4** below.

Aerial inspection surveys

- 3.21. **Table 3.7** presents the findings of the aerial inspection surveys of trees. The aerial inspection surveys enabled close inspection of all potential roost features of each tree and therefore, the suitability of each tree for roosting bats was updated where, for example, features which were



visible from the ground were not suitable for roosting bats on close inspection. **Table 3.7** below provides a summary of findings and the updated suitability of each tree following the initial aerial inspection survey.

- 3.22. No roosting bats were identified during the aerial inspection surveys. Therefore, roosting bats are considered likely absent from the trees climbed. Full results of all three aerial inspection surveys are presented in **Appendix 2**.

Table 3.7: Aerial inspection survey results

Tree number	Tree species	Grid reference	Initial suitability following PBRA	Updated tree suitability following first aerial inspection survey	Number of aerial inspection visits completed and dates	Evidence or presence of roosting bats (Y/N)
T2	London plane	TQ28000 88209	Moderate	Low	1 – completed on 26 th August 2021	N
T4	London plane	TQ27974 88224	Moderate	Moderate	2 – completed on 26 th August 2021 and 29 th September 2021	N
T5	London plane	TQ27972 88211	High	Negligible	1 – completed on 26 th August 2021	N
T6	Hazel	TQ27481 88222	Moderate	Negligible	1 – completed on 26 th August 2021	N
T9	London plane	TQ27972 88211	Moderate	Low	1 – completed on 26 th August 2021	N
T11	London plane	TQ27958 88215	High	High	3 – completed on 26 th August, 16 th September and 29 th September 2021	N
T15	<i>Prunus</i> sp.	TQ27967 88195	Moderate	Low	1 – completed on 26 th August 2021	N
T16	Hazel	TQ27551 88221	Moderate	Negligible	1 – completed on 26 th August 2021	N

Birds

- 3.23. The data search returned records for eight bird species within 1km of the site: lesser redpoll *Acanthis cabaret*, herring gull *Larus argentatus*, firecrest *Regulus ignicapilla*, garganey *Spatula querquedula*, green sandpiper *Tringa ochropus*, Redwing *Turdus iliacus*, song thrush *Turdus philomelos* and fieldfare *Turdus pilaris*. with the closest record being of redwing, located 0.32km east of the site.
- 3.24. The scattered trees and scrub habitats within the site have the potential to support nesting or foraging birds. Given the prevalence of sub-optimal habitats such as hardstanding, buildings and amenity grassland in addition to the urban setting of the site, it is assumed that birds present will



predominately be comprised of common and widespread species and it is unlikely that significant assemblages of breeding or over-wintering birds would utilise the site.

Reptiles

- 3.25. The data search returned no records of reptile species within the 1km search area.
- 3.26. The majority of habitats within the site are largely sub-optimal for reptiles. The small area of dense scrub and a single pile of garden waste in the north west of the site (Target Note TN1 on Plan **13786/P01a**) offer limited opportunities for reptiles to forage and shelter. It is therefore assumed that any populations of reptiles present would be small in number and formed of common and widespread species. In the unlikely event that small numbers of reptiles are present on the site, it is likely they would be found at the periphery of the site only, within the small area of dense scrub for example.

Other priority species

- 3.27. The data search returned records for west European hedgehog *Erinaceus europaeus* within the 1km search area, with the closest record approximately 0.26km north east of the site. The most recent record was from 2020.
- 3.28. The amenity grassland and scrub habitats within the site are suitable for hedgehog to forage and the pile of garden waste may offer shelter or hibernation opportunities for west European hedgehog.



Section 4: Potential Impacts, Mitigation and Enhancements

- 4.1 Where there are potential impacts to the ecological features described above during either the construction or operational phases of the development they are described below. Where impacts would trigger legislation or planning policy (as set out in **Appendix 1**), the requirement for mitigation is noted.

Statutory Designated sites

- 4.2 The site is not subject to a statutory conservation designation. The European sites and nationally designated sites identified during the data search are not considered likely to be affected by the development, considering the already urban context of the site and the large distances between the site and these designated sites.

Non-statutory Designated sites

- 4.3 The site is not subject to a non-statutory conservation designation. The non-statutory designated sites identified during the data search are all considered sufficiently distant from the site that no impacts are anticipated as a result of the development. Changes in air quality are considered to be minimal and last for the duration of construction only, given the nature of the development will maintain similar usage of the site. Again, given the nature of the development, no increases in recreational pressure to designated sites are anticipated as a result of the development.

Habitats and flora

- 4.4 The majority of habitats within the site are of negligible ecological importance. The small pond and scattered broadleaved trees are considered to be of up to local ecological importance.
- 4.5 All retained trees should be protected in line with best practice guidance BS5837 (BSI 2012) and in accordance with the Arboriculture Impact Assessment (AIA) prepared by Tyler Grange Group Ltd (in production at the time of writing).
- 4.6 Habitat enhancement measures are proposed for retained habitat (see **Section 5**, Biodiversity Net Gain) which should be established within a Landscape and Ecology Management Plan (LEMP), to be completed at the reserved matters stage. Enhancement of habitats aligns with the London Plan 2021 Policy G6. It is considered that the habitat enhancements are likely to outweigh the loss of areas of dense scrub, scattered trees and pond habitats and will lead to an overall enhancement of the habitat resource at the site.

Protected and priority fauna

Amphibians

- 4.7 Great crested newts, their eggs, breeding sites and resting places are European protected species under the Conservation of Habitats and Species Regulations 2017 (as amended) and are afforded protection under Schedule 5 of the WCA 1981 (as amended). Common toad and great crested newt are also identified as Species of Principal Importance (SoPI) under the NERC Act 2006.



- 4.8 The small pond P1 located within the site was found to be of 'poor' suitability for great crested newt following HSI assessment. The pond had sheer concrete banks, was small in size and was largely dominated by duckweed, making it sub-optimal for the majority amphibians. Furthermore, the pond has limited habitat connectivity to other ponds in the area and there were few records of amphibians returned in the data search.
- 4.9 It is therefore assumed that great crested newt and other amphibians are likely absent from the site and amphibians are discussed no further within this report.

Bats

- 4.10 Bat species, their breeding sites and resting places are European protected species under the Conservation of Habitats and Species Regulations 2017 (as amended) and are afforded protection under Schedule 5 of the Wildlife and Countryside Act (WCA) 1981 (as amended), making it an offence to capture, injure or kill a bat or to disturb or obstruct access to a bat roost. Certain species of bat are also SoPI under the NERC Act 2006.

Roosting bats

- 4.11 No roosting bats or evidence of roosting bats was identified during the aerial tree inspections. It is therefore assumed that roosting bats are likely absent from the trees surveyed and those of negligible suitability (trees T1-T1 and T14-T31 on the bat survey plan **13786/P01**). It was not possible to inspect tree T13 but, given this is within a residential garden fenced-off from the built form proposed as part of the development, impacts upon any bat roosts that may be present within tree T13 are considered unlikely.
- 4.12 A single soprano pipistrelle was observed likely emerging from the same location (location E1 on the Emergence Survey Plan **13786/P04**) on building B1 during emergence surveys on 15th September and 29th September 2021. Soprano pipistrelle is a very common and widespread species with a population estimated at 2,980,000 individuals in England (JNCC and BCT 2020). It is therefore concluded that a day roost of low conservation significance, formed of a single soprano pipistrelle is present within building B1.
- 4.13 A licence from Natural England will therefore need to be obtained prior to the demolition of building B1. Given the low conservation status of the roost identified, a Bat Low Impact Class Licence (BLICL) would be appropriate for removal of the roost. The BLICL will enable the destruction of the roost to proceed lawfully. Prior to starting demolition works, the BLICL registered ecologist will attend the site to carry out an inspection of all roost features to check for any bats present. Works will be timed to avoid sensitive period for bats, to be advised by the licenced ecologist. A toolbox talk will be used to brief the roofing contractors on the possible presence of bats, and the required approach. The ecologist will remain on-site to supervise soft-stripping of building B1, which will include the removal of features which form PRFs (e.g. lifted tiles or damaged soffits), as necessary until the PRFs are rendered unusable by bats. If any live bats are found during works, they will be transferred by the licenced ecologist to one of the replacement roosts (described below) which will be erected in advance of the works taking place.
- 4.14 An alternative roost site such as a bat box should be installed on a building or tree as close to building B1 as possible but positioned away from works which may disturb bats. The bat box should ideally be integrated within building design. If this is not possible, be a free-hanging Schwegler 1FF type or similar could be placed as close to the roost location as possible. A BLICL



licenced ecologist would supervise clearance works and installation of the alternative roost site and would capture and move small numbers of bats (if present at the time of clearance) to the alternative roost location.

- 4.15 Providing bat boxes are installed, the development may provide greater roosting opportunities for bats than exist at baseline.

Bat activity

- 4.16 The site, being primarily comprised of hardstanding and a building with amenity grassland and introduced shrub habitats, offers few opportunities for foraging or commuting bats. It is anticipated that any bat activity would be concentrated along the boundaries of the site, such as the lines of trees outside of the site, adjacent to the north and west boundaries. The habitats within the site will be enhanced (as described in **Section 5, Biodiversity Net Gain**) as part of the development, which will provide additional foraging opportunities for bats.
- 4.17 A sensitive lighting strategy should be employed, incorporating measures to maintain unlit areas and minimise light spill onto retained and newly created habitats. Measures may include low bollard lighting, use of hoods and cowls on lamps and use of low-pressure sodium or, where glass glazing is preferred, use of high-pressure sodium instead of metal halide lamps (Collins, 2016; BCT and Institute of Lighting Professionals, 2018). Trees identified as suitable for bat roosts should either be kept dark or be subject to sensitive lighting to avoid the illumination of potential roost features. Lighting should also be designed to avoid illuminating newly installed bat boxes. The sensitive lighting strategy could be secured by an appropriately worded planning condition.
- 4.18 Providing the above measures are followed, no adverse impacts on commuting or foraging bats are anticipated as a result of the development.

Birds

- 4.19 All breeding birds, their nests, eggs and young are protected under the WCA 1981 (as amended), which makes it illegal to knowingly damage or destroy a nest site while it is in use or being built. It is therefore recommended that any required vegetation clearance works are completed outside of the core nesting bird season (March-August inclusive), although nests can be present at any time of year. Where this is not possible, a pre-clearance nesting bird check should be completed by a suitably experienced ecologist. If nesting birds are found to be present, a buffer zone will be instated, with no works to be undertaken within the buffer zone until the chicks have fledged. A repeat visit by the ecologist will be required to determine if the chicks have fledged. These measures should be incorporated into a CEMP.
- 4.20 The existing scattered trees, introduced shrub and dense scrub habitats within the site offer foraging, roosting and nesting opportunities for birds. Alternative nesting opportunities will be created throughout the site through habitat creation (See **Section 5, Biodiversity Net Gain**).
- 4.21 The site could be further enhanced for nesting birds through the incorporation of bird boxes into the scheme design. These could take the form of free hanging bird boxes placed within newly created habitat or on buildings.
- 4.22 Providing the above measures are followed, no adverse impacts on birds are anticipated as a result of the development.



Reptiles

- 4.23 All common species of reptile in the UK including, slow worm *Anguis fragilis*, grass snake *Natrix helvetica*, common lizard *Zootoca vivipara* and adder *Vipera berus* are protected against killing, injuring or trade under Section 9 (Schedules 1 and 5) of the Wildlife and Countryside Act 1981 (as amended). Reptiles are identified as a priority species within the London BAP (GiGL 2021).
- 4.24 Habitat features on the boundaries of the site will predominately be retained and newly created habitat may offer opportunities for reptiles to forage, bask or breed. Therefore, habitat connectivity to the wider landscape will be maintained and the site is anticipated to offer areas of suitable habitat for reptiles which may attempt to access the site in the future.
- 4.25 Best practice measures should be employed and set out in the CEMP which are considered to ensure compliance with legislation protecting reptiles including:
- Pre-construction walkover survey and dismantling any log / brash piles such as the garden waste pile (TN1 on the Habitat Features and Preliminary Bat Roost Assessment Plan **13786/P01a**) carefully by hand outside of the reptile hibernation period (October-March inclusive);
 - Soft-start of vegetation clearance machinery to allow any reptiles to move away from the area;
 - Construction works limited to daylight hours;
 - Trenches or deep pits will be covered or a means of escape provided for badgers if left overnight; and
 - Careful storage of topsoil / regular inspections.
- 4.26 Providing the above measures are followed, no adverse impacts on reptiles are anticipated as a result of the development

Other priority species

- 4.27 West European hedgehog is a SoPI under the NERC Act 2006 (as amended). This species may utilise existing habitats within the site. The newly created habitats as part of the development will provide opportunities for hedgehogs to forage, breed and hibernate.
- 4.28 It is recommended that further habitat connectivity is provided for west European hedgehog through the use of fencing around the boundaries of the site which the species may pass through. This can be achieved by designing at least one small gap at the base of fences and may be secured by an appropriate planning condition.
- 4.29 Further enhancements can be provided for this species by providing hibernacula within the site. These can be created by making a 2x3m scrape in the ground which is filled with logs and rubble. The turf which was removed to create the scrape is then positioned on top of the materials used to create the habitat pile. Structures such as these would provide increased hibernation opportunities for priority species such as toads and hedgehogs and would also provide benefits for other amphibians and reptiles which may utilise the site in the future.



- 4.30 Providing the above measures are followed, no adverse impacts on priority species are anticipated and these species may benefit from habitats created as part of the development.



Section 5: Biodiversity Net Gain Assessment

- 5.1 A development achieves biodiversity net gain when the total biodiversity units present post development is higher than that of the biodiversity units present on site prior to development. Biodiversity offsetting is used to achieve biodiversity net gain.
- 5.2 Biodiversity offsetting involves the provision of compensatory habitat for residual habitat losses and/or indirect effects arising from development that persists despite the implementation of appropriate avoidance and mitigation measures. A calculation is produced to assess the effects of a scheme on the habitats present versus the proposed compensatory habitat creation and enhancement measures. In order to determine whether offsetting is required, Defra's Biodiversity Net Gain Metric 3.0 has been used to calculate the biodiversity value of the site before and after development in terms of 'biodiversity units' to give an overall biodiversity net gain or loss.

Existing Habitats

- 5.3 The following habitats are present within the red line boundary of the site and are shown on Habitat Features and Potential Bat Roost Assessment Plan (ref: **13786/P01a**). A brief summary of each habitat is provided below along with the habitat condition and category it is assigned within the biodiversity net gain metric. No linear habitats were present. The rationale for condition assessments are detailed within the metric (ref: **13786/BNG**) and post-development habitats are shown on the post-development habitat plan (ref: **13786/P05**).
- 5.4 The UK Habitat Classification definitions (Butcher *et al.* 2020) have been used to convert the Phase 1 Habitat Types into UK Habitat types as these are the definitions that the metric is based upon.

Baseline habitat areas and condition:

- **Grassland – Modified grassland (0.07ha):** This category includes areas of amenity grassland habitat within the site and has been assigned a condition of "poor";
- **Urban – Developed land; sealed surface (0.26ha):** This category includes the hardstanding and buildings within the site. Habitat condition is not applicable to this category;
- **Urban – Introduced shrub (0.04ha):** This category includes the ornamental planting present within the site and is automatically assigned a condition of "poor" within the metric;
- **Urban – Urban tree (0.02ha):** This category includes the scattered trees within the site and has been assigned a condition of "moderate" within the metric.

Proposed, Enhanced and Retained Habitats

- 5.5 The Illustrative Landscape Masterplan produced by Guarda (reference: 21069-GUA-DR-L-001 P04) as shown in **Appendix 3**, has been used to calculate the proposed, retained and enhanced habitat areas. A brief summary of each habitat is provided below along with the habitat condition and category it is assigned within the biodiversity net gain metric. The rationale for target condition assessments is detailed within the metric (ref: **13786/BNG**) and the approximate location and extent of post-development habitats are shown on the post-development habitat plan (ref: **13786/P05**)



Habitat areas and target condition:

Retained

- **Urban – Urban tree (0.01ha):** Five existing trees within the site will be retained as part of the development.

Proposed

- **Urban – Developed land; sealed surface (0.27ha):** this category includes all developed surfaces such as roads, parking spaces, pavements and buildings. Habitat condition is not applicable to this category;
- **Urban – Extensive green roof (0.01ha):** this category includes the area proposed as extensive green roof on the eastern portion of the proposed building. It is assumed that this habitat type will contain a diverse range of flowering plant species and less than 5% of the total vegetated area is comprised of invasive non-native species, thus achieving “moderate” condition;
- **Urban – Introduced shrub (0.09ha):** this category includes areas of ornamental planting beds proposed within the site and is automatically assigned a condition of “poor” within the metric; and
- **Urban – Urban tree (0.04ha):** This category includes the planted ornamental and specimen trees proposed within the site. It is assumed that planted trees will comprise more than 70% native species and will be protected from anthropogenic activities such as vandalism, with no regular pruning regime and that the canopy of the trees will over-sail vegetation beneath, thus achieving “moderate” condition within the metric.

Biodiversity Net Gain Metric Results summary

5.6 As described within the Defra Biodiversity Metric 3.0 (**13786/BNG**) and summarised below in **Figure 5.1**, based on the habitats present on site that will be subject to direct impacts and those to be created, the development would achieve a net gain of **+5.71%** habitat units. Given there were no linear features present at baseline, a net gain in linear units it not possible.

On-site baseline	Habitat units	0.38
	Hedgerow units	0.00
	River units	0.00
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.40
	Hedgerow units	0.00
	River units	0.00
On-site net % change (Including habitat retention, creation & enhancement)	Habitat units	5.71%
	Hedgerow units	0.00%
	River units	0.00%
Off-site baseline	Habitat units	0.00
	Hedgerow units	0.00
	River units	0.00
Off-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.00
	Hedgerow units	0.00
	River units	0.00
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.02
	Hedgerow units	0.00
	River units	0.00
Total on-site net % change plus off-site surplus (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	5.71%
	Hedgerow units	0.00%
	River units	0.00%
Trading rules Satisfied?	Yes	

Figure 5.1: Biodiversity Net Gain Assessment Results Summary, taken from the Defra 3.0 Metric



- 5.7 As shown in **Figure 5.1** a net gain is anticipated following the proposed development. Achieving net gain aligns with the NPPF in addition to policy G6 of the London Plan and therefore it is concluded that the project complies with relevant policy on biodiversity net gain.

Management

- 5.8 The results of the DEFRA 3.0 metric are based on the habitats within the site being maintained at a certain condition, as prescribed by the condition assessment sheets published by DEFRA. In order to achieve these conditions and maintain them, specific establishment and management practices will be required.
- 5.9 As such, details of habitat establishment and long-term management could be provided through the production of a Landscape and Ecological Management Plan (LEMP). The LEMP would set out the prescriptions for the establishment and maintenance of the habitats on site for 30 years and would also outline details on additional ecological enhancements such as the positions of bat and bird boxes.



Section 6: Conclusions

- 6.1 With the implementation of the mitigation and enhancements described in **Section 4** and **Section 5**, it is considered that the proposed development would conform with relevant legislation, national planning policy and local planning policy as detailed in **Appendix 1**.
- 6.2 No impacts on statutory or non-statutory designated sites are considered likely as a result of the development.
- 6.3 Approximately half the total area of scattered trees within the site will be retained and protected from works. Trees outside the boundaries of the site will be protected from development works. Those habitats of up to local ecological importance that are proposed to be subject to habitat loss (namely, scattered trees) will be more than mitigated through the proposed habitat creation. These enhancements will achieve a biodiversity net gain of **+5.71%** and are likely to offer nesting, foraging and commuting opportunities for species such as bats, birds, reptiles, amphibians and west European hedgehogs.
- 6.4 The bat roost present within building B1 should be protected from disturbance and development activities until it can be carefully removed under a licence (such as a BLICL). An alternative roost location should be provided as close to the previous roost location as possible, ideally integrated within building design.
- 6.5 Any vegetation removal should be undertaken outside of the core nesting bird season (March–August, inclusive), otherwise, a pre-works check by an Ecological Clerk of Works (ECoW) should be undertaken to determine whether active birds' nests are present. If nest(s) are present, no nests, eggs or young should be destroyed and an appropriate buffer must be instated until the chicks have been confirmed as fledged by an ECoW.
- 6.6 The mitigation and enhancement recommendations, such as the provision of bird and bat boxes, sensitive construction methods, a sensitive lighting strategy in relation to bats and a long-term management plan to secure the ecological enhancements that are proposed as part of the development could be controlled by appropriately worded planning conditions.
- 6.7 In conclusion, it is considered that the future development of the site would accord with relevant planning policy and the proposals seek to protect and enhance ecological features. Given the biodiversity net gain demonstrated by the figures above, it is considered that the scheme will result in an overall enhancement of the site for biodiversity.



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Appendix 1: Relevant Legislation and Policy

- A1.1. Specific habitats and species receive legal protection in the UK under various pieces of legislation, including:
- The Wildlife and Countryside Act (WCA) 1981 (as amended);
 - The Conservation of Habitats and Species Regulations 2017 (as amended);
 - The Countryside and Rights of Way (CROW) Act 2000;
 - The Natural Environment and Rural Communities Act (NERC) 2006;
 - The Hedgerows Regulations 1997; and
 - The Protection of Badgers Act 1992.
- A1.2. The European Council Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna, 1992, often referred to as the 'Habitats Directive', provides for the protection of key habitats and species considered of European importance. Annexes II and IV of the Directive list all species considered of community interest. The Birds Directive (formally known as Council Directive 2009/147/EC on the conservation of wild birds) was also adopted in 2009. These directives have been transposed into UK law through The Conservation of Habitats and Species Regulations 2017 (as amended).
- A1.3. In Britain, the WCA 1981 (as amended) is the primary legislation protecting habitats and species. SSSIs, representing the best examples of our natural heritage, are notified under the WCA 1981 (as amended) by reason of their flora, fauna, geology or other features. All breeding birds, their nests, eggs and young are protected under the Act, which makes it illegal to knowingly destroy or disturb the nest site during nesting season. Schedules 1, 5 and 8 afford protection to individual birds, other animals and plants.
- A1.4. The CROW Act 2000 strengthens the species enforcement provisions of the WCA 1981 (as amended) and makes it an offence to 'recklessly' disturb a protected animal whilst it is using a place of rest or shelter or breeding/nest site.

National Planning Policy

National Planning Policy Framework, July 2021

- A1.5. The National Planning Policy Framework (NPPF) was updated in July 2021 and sets out the Government's planning policies for England and how these should be applied. It replaces the previous edition of the National Planning Policy Framework, published in July 2019.
- A1.6. Paragraph 11 of the NPPF states that:
- "Plans and decisions should apply a presumption in favour of sustainable development."
- A1.7. Section 15 of the NPPF (paragraphs 174 to 182) considers the conservation and enhancement of the natural environment including habitats and biodiversity (paragraphs 179-182)



- A1.8. Paragraph 174 states that planning and decisions should contribute to and enhance the natural and local environment by:
- “protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
 - recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland; and
 - minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures”
- A1.9. Paragraph 175 states that plans should distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.
- A1.10. Paragraph 179 states that in order to protect and enhance biodiversity and geodiversity, plans should:
- “Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
 - promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.”
- A1.11. When determining planning applications, Paragraph 180 states that local planning authorities should aim to conserve and enhance biodiversity by applying 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.”

A1.12. As stated in paragraph 181 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.”

A1.13. Paragraph 182 states that the presumption in favour of sustainable development does not apply where the planned project is likely to have a significant effect on a habitat site (alone or in combination with other plans or projects) unless an appropriate assessment has concluded the plan or project will not adversely affect the integrity of the habitats site.

Local Planning Policy

The London Plan, The Spatial Development Strategy for Greater London, March 2021

A1.14. Policies relating to ecology and nature conservation can be found in Chapter 8: Green Infrastructure and Natural Environment, which are summarised as follows:

A1.15. *“Policy G1: Green Infrastructure*

- A. *London’s network of green and open spaces, and green features in the built environment, should be protected and enhanced. Green infrastructure should be planned, designed and managed in an integrated way to achieve multiple benefits.*
- B. *Boroughs should prepare green infrastructure strategies that identify opportunities for cross-borough collaboration, ensure green infrastructure is optimised and consider green infrastructure in an integrated way as part of a network consistent with Part A.*
- C. *Development Plans and area-based strategies should use evidence, including green infrastructure strategies, to:*
 - 1) *identify key green infrastructure assets, their function and their potential function.*
 - 2) *identify opportunities for addressing environmental and social challenges through strategic green infrastructure interventions.*
- D. *Development proposals should incorporate appropriate elements of green infrastructure that are integrated into London’s wider green infrastructure network should prepare green infrastructure strategies that integrate objectives relating to open space provision, biodiversity conservation, flood management, health and wellbeing, sport and recreation.*

A1.16. *Policy G5: Urban Greening*



- A. *Major development proposals should contribute to the greening of London by including urban greening as a fundamental element of site and building design, and by incorporating measures such as high-quality landscaping (including trees), green roofs, green walls and nature-based sustainable drainage.*
- B. *Boroughs should develop an Urban Greening Factor (UGF) to identify the appropriate amount of urban greening required in new developments. The UGF should be based on the factors set out in Table 8.2, but tailored to local circumstances. In the interim, the Mayor recommends a target score of 0.4 for developments that are predominately residential, and a target score of 0.3 for predominately commercial development (excluding B2 and B8 uses).*
- C. *Existing green cover retained on site should count towards developments meeting the interim target scores set out in (B) based on the factors set out in Table 8.2.*

A1.17. *Policy G6: Biodiversity and Access to nature*

- A. *Sites of Importance for Nature Conservation (SINCs) should be protected.*
- B. *Boroughs, in developing Development Plans, should:*
 - 1) *use up-to-date information about the natural environment and the relevant procedures to identify SINCs and ecological corridors to identify coherent ecological networks.*
 - 2) *identify areas of deficiency in access to nature (i.e. areas that are more than 1km walking distance from an accessible Metropolitan or Borough SINC) and seek opportunities to address them.*
 - 3) *support the protection and conservation of priority species and habitats that sit outside the SINC network, and promote opportunities for enhancing them using Biodiversity Action Plans.*
 - 4) *seek opportunities to create other habitats, or features such as artificial nest sites, that are of particular relevance and benefit in an urban context.*
 - 5) *ensure designated sites of European or national nature conservation importance are clearly identified and impacts assessed in accordance with legislative requirements.*
- C. *Where harm to a SINC is unavoidable, and where the benefits of the development proposal clearly outweigh the impacts on biodiversity, the following mitigation hierarchy should be applied to minimise development impacts:*
 - 1) *avoid damaging the significant ecological features of the site.*
 - 2) *minimise the overall spatial impact and mitigate it by improving the quality or management of the rest of the site.*
 - 3) *deliver off-site compensation of better biodiversity value.*
- D. *Development proposals should manage impacts on biodiversity and aim to secure net biodiversity gain. This should be informed by the best available ecological information and addressed from the start of the development process.*
- E. *Proposals which reduce deficiencies in access to nature should be considered positively.*

A1.18. *Policy G7: Trees and woodlands*



- A. *London's urban forest and woodlands should be protected and maintained, and new trees and woodlands should be planted in appropriate locations in order to increase the extent of London's urban forest – the area of London under the canopy of trees.*
- B. *In their Development Plans, boroughs should:*
- 1) *protect 'veteran' trees and ancient woodland where these are not already part of a protected site.*
 - 2) *identify opportunities for tree planting in strategic locations.*
- C. *Development proposals should ensure that, wherever possible, existing trees of value are retained. If planning permission is granted that necessitates the removal of trees there should be adequate replacement based on the existing value of the benefits of the trees removed, determined by, for example, i-tree or CAVAT or another appropriate valuation system. The planting of additional trees should generally be included in new developments – particularly large-canopied species which provide a wider range of benefits because of the larger surface area of their canopy."*

Haringey Local Plan

A1.19. Haringey Local Plan is currently made up of Strategic Policies, Development Management Policies and Site Allocations documents and Tottenham Area Action Plan, alongside the London Plan. Policies relevant to this assessment are summarised below:

A1.20. The Development Management Development Plan Document (DPD) (Haringey Council 2017) Policy DM19 Nature Conservation states:

"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.

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:

a The harm cannot be reasonably avoided; and

b It has been suitably demonstrated that appropriate mitigation can address the harm caused."

The Strategic Policies (Haringey Council 2013) policy SP13: Open Space and Biodiversity states:

"All development shall protect and improve sites of biodiversity and nature conservation, including private gardens through its:

- *Contribution to wildlife and ecological habitats and, where possible, include green and brown roofs, rainwater harvesting, green walls, bird and bat nesting/roosting opportunities;*
- *Protection, management and maintenance of existing trees and the planting of new trees where appropriate; and*



- *Protection, enhancement and creation of Sites of Importance for Nature Conservation (SINCs) and Local Nature Reserves (LNRs)."*

Highgate Neighbourhood Plan

A1.21. Highgate Neighbourhood plan (Highgate Neighbourhood Forum 2017) was adopted by Haringey Council in July 2017 and planning applications within the Highgate area need to have regard to the policies within the plan, alongside the Local Plan as described above. Relevant policy within the Highgate Neighbourhood plan is described below.

A1.22. Policy OS4: Biodiversity and Highgate's Green Grid states:

"Development should support the ability of 'Highgate's Green Grid' (detailed in Appendix 3) to act as an element in the local ecological network. The impact of a proposal on the Green Grid will be assessed against its wider benefits to the local area. While the composition of garden planting cannot be controlled through policy, any new development or public realm planting project will be encouraged to plant tree species indigenous to the area and, when possible, of genetically local stock, and to undertake, wherever appropriate, the planting of areas conducive to the promotion of the local ecology"

Biodiversity Action Plans

The London BAP

A1.23. The London BAP (GiGL 2021) outlines Action Plans for the following species and habitats:

Habitats	Species
• Acid grassland • Chalk grassland • Heathland • Parks and urban green spaces • Private gardens • Reedbeds • Rivers and Streams • Standing Water • Tidal Thames • Wasteland	• Bats • Black poplar • House sparrow • Mistletoe • Reptiles • Sand Martin • Stag Beetle • Water vole

The Haringey BAP

A1.24. The Haringey BAP published in 2009 (Haringey Council 2009) represents the latest local BAP and is still drawn from in informing planning decisions The Haringey BAP identifies Habitat and Species Action Plans for the following habitats and species groups:

- Allotments;
- Built structures;
- Gardens;
- Parks and Open Spaces;



- Standing water;
- Woodlands;
- Veteran trees; and
- Bats (all species).



Appendix 2: Bat survey results

Preliminary Bat Roost Assessment

Table A2.1 PBRA results: trees

Tree number	Tree species	Potential roost features	Suitability for roosting bats	Location relative to the site	
T1	Beech	Join gap, 4.5m, N	Low	Within the site	
T2	London Plane	Knot holes 4.5m E & 4m W	Mod	Adjacent to the site	



T4	London Plane	Dense Ivy/honey suckle cover	Mod	Adjacent to the site	
T5	London Plane	Dense Ivy/honey suckle cover	High	Adjacent to the site	



T6	English Laurel	Dense Ivy/honey suckle cover	Mod	Adjacent to the site	
T9	London Plane	Dense Ivy/honey suckle cover	Mod	Adjacent to the site	



T11	London Plane	Knot hole, 4m, E	High	Adjacent to the site	
T12	London Plane	Ivy cover	Low	Adjacent to the site	



T13	London Plane	Dense Ivy/honey suckle cover	High	Within a private property adjacent to the site	
T15	Prunus sp.	Knot hole, 3m W, 3.3m S & 3m E	Mod	Within the site	



T16	Hazel	Ivy cover	Mod	Adjacent to the site	
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Table A2.2 PBRA results: Buildings

Building	Type	Potential roost features (as shown on the Habitat Features and PBRA Plan 13786/P01a)	Suitability for roosting bats	Photographs
B1	The former care home building comprising a series of conjoined buildings of brick construction with pitched and flat roof sections	BF1: Gap behind mounted board, 14m E	High	
		BF2: Vertical hanging tiles, 9m W		
		BF3: Damaged soffit		
		BF4: lifted tiles		
		BF5: lifted tiles		
		BF6: damaged bricks/soffit		
		BF7: lifted tiles		
		BF8: lifted tiles		
		BF9: damage to soffit		
		BF10: raised tiles		
		BF11: hole in soffit		
		BF12: raised tiles around vent		
		BF13: lifted flashing		
		BF14: gap between wall and cladding		
		BF15: gap between wall and soffit		
		BF16: gap between cladding and wall		



Aerial inspection

Table A2.1 Aerial inspection results summary visit 1 (25th - 26th August 2021)

Tree number	Tree species	Grid reference	Diameter at breast height	Potential roost feature (PRF)	Approximate height of PRF from ground level	Aspect of PRF	Aspect PRF facing	PRF category	Evidence or presence of roosting bats (Y/N)	Notes	Overall tree suitability
T2	London plane	TQ28000 88209	1m	Knot holes	4m	W	W	Low	N	Small 5cm cavity in knot hole opening	Low
					3.5m	W	W	Low	N	c.10cm diameter cavity	
					4.5m	E	E	Low	N	Upwards facing cavity leading inwards c.5cm	
					8m	E	E	Low	N	5cm cavity leading upwards	
T4	London plane	TQ27974 88224	1.25m	Knot holes	10m	W	W	Moderate	N	c.10-15cm diameter cavity	Moderate
					8m	W	W	Moderate	N	c.10cm cavity containing a disused birds nest	
T5	London plan	TQ27972 88211	0.75m	Ivy stems	0-5m	N/A	N/A	Negligible	N	Ivy stems up to 6m on tree stem	Negligible
					8m	E	E	Negligible	N	Small crevice full of decomposing leaves	
				Cracks in ivy	8m	E	E	Negligible	N	Very small crevices but not of sufficient size for roosting bats	
T6	Hazel	TQ27481 88222	0.5m	Ivy-clad	3m	N/A	N/A	Negligible	N	Ivy on tree stem but no PRFs	Negligible



T9	London plane	TQ27972 88211	Multi-stemmed	Flaking bark	6m	W	W	Low	N	Flaking bark on stem, only large enough for a single bat	Low
				Decaying limb	10m	S	S	Negligible	N	Opening in top of limb, c.5cm, upward facing	
				Knot holes	6-10m	N	N	Negligible	N	Number of occluded knot holes	
					8m	N	N	Negligible	N	Upwards facing knot hole, shallow	
					7m	W	W	Negligible	N	Upwards facing knot hole, shallow	
T11	London plane	TQ27958 88215	1m	Large knot hole	4m	E	E	High	N	Large opening c.10cm diameter, leading to cavity which extends c.1.15m upwards	High
T15	<i>Prunus</i> sp.	TQ27967 88195	0.5m	Knot holes	3m	W	W	Low	N	Small cavity extending downward by 2-3cm	Low
					3m	E	E	Negligible	N	Shallow and open vertically with no crevice	
					3.3m	S	S	Negligible	N	Slight depression with no suitable cavity	
T16	Hazel	TQ27551 88221	0.75m	None	N/A	N/A	N/A	Negligible	N	No potential roost features	Negligible



Table A2.2: Aerial inspection results summary visit 2 (16th September 2021)

Tree number	Tree species	Grid reference	Diameter at breast height	Potential roost feature (PRF)	Approximate height of PRF from ground level	Aspect of PRF	Aspect PRF facing	PRF category	Evidence or presence of roosting bats (Y/N)	Notes
T11	London plane	TQ27958 88215	1m	Knot hole	4m	E	E	High	N	Large opening c.10cm diameter, leading to cavity which extends c.1.15m upwards

Table A2.3: Aerial inspection results summary visit 3 (29th September 2021)

Tree number	Tree species	Grid reference	Diameter at breast height	Potential roost feature (PRF)	Approximate height of PRF from ground level	Aspect of PRF	Aspect PRF facing	PRF category	Evidence or presence of roosting bats (Y/N)	Notes
T4	London plane	TQ27974 88224	1.25m	Knot holes	10m	W	W	Moderate	N	c.10-15cm diameter cavity
					8m	W	W	Moderate	N	c.10cm cavity containing a disused birds nest
T11	London plane	TQ27958 88215	1m	Large knot hole	4m	E	E	High	N	Large opening c.10cm diameter, leading to cavity which extends c.1.15m upwards



Emergence surveys

Figure A3.1: Key to bat species codes used in tables below:

KEY: (peak frequency)			
Pipistrelle	Myotis	Nyctalus	Other
Ppi – Com Pipistrelle (45)	My – Myotis sp.	Nn – Noctule (25)	LHS – Lesser Horseshoe (110)
Ppy – Sop Pipistrelle (55)	Mbe – Bechstein's (50)	Ni – Leisler's (27)	GHS – Greater Horseshoe (82)
Pip – Unid. pipistrelle	Mbr – Whiskered/Brandt's (45)		Bb – Barbastelle (32)
Pn – Nathusius (39)	Md – Daubenton's (45-50)	Nyc – Unid Nyctalus	Pa – Brown Long-Eared (35)
Unid – Unidentified bat	Mn – Natterer's (50)		Ep – Serotine (25-30)

Table A3.1: Emergence Survey 1, Building B1

Date: 23/08/2021			
Timing:	Sunset: 20:08	Start time: 19:53	End time: 21:38
Weather:	At start:		At end:
Cloud Cover (%)	0%		0%
Wind (Beaufort Scale)	2		2
Precipitation	Dry		Dry
Temperature (°C)	17		15
Surveyor initials and Surveyor Location (SL):	Survey results:		
AK, SL1	No Emergence. Ppy and Ppi commuting.		
MK, SL2	No Emergence. Ppi commuting		
SK, SL3	No Emergence. Ppy and Ppi commuting.		
RR, SL4	No Emergence. Ppi commuting.		
JS, SL5	No Emergence. Ppy commuting.		



Table A3.2: Emergence Survey 2, Building B1

Date: 15/09/2021			
Timing:	Sunset: 19:01	Start time: 19:01	End time: 20:46
Weather:	At start:		At end:
Cloud Cover (%)	75%		75%
Wind (Beaufort Scale)	1		1
Precipitation	Dry		Dry
Temperature (°C)	19		17
Surveyor initials and Surveyor Location (SL):	Survey results:		
FB, SL1	No emergence. PPi, PPy and Nn commuting and foraging		
GB, SL2	Emergence of Ppy from location E1 at 19:52. Nn commuting.		
SC, SL3	No emergence. PPi and PPy commuting although not recorded by detector.		
JH, SL4	No emergence. One Ppy foraging and PPi commuting		
TA, SL5	No emergence. PPi, PPy and unidentified Nyc or Ep species commuting and foraging		



Table A3.4: Emergence Survey 3, Building B1

Date: 29/09/2021			
Timing:	Sunset: 18:44	Start time: 18:29	End time: 20:14
Weather:	At start:		At end:
Cloud Cover (%)	25%		25%
Wind (Beaufort Scale)	1		1
Precipitation	Dry		Dry
Temperature (°C)	12		9
Surveyor initials and Surveyor Location (SL):	Survey results:		
JH, SL1	Emergence of Ppy from location E1 at 19:15. Ppy and Ppi commuting		
GB, SL2	No emergence. Ppi and Ppy commuting.		
CO, SL3	No emergence. Ppi and and unidentified Nyc or Ep species foraging and commuting.		
JS, SL4	No emergence. Ppi commuting.		
RR, SL5	No emergence. Ppi commuting although not recorded by detector.		



Appendix 3: Illustrative Landscaping Plan



ILLUSTRATIVE LANDSCAPE MASTERPLAN



- KEY**
- Application boundary
 - View Road vehicular paving. Permeable concrete block paving.
 - View Road pedestrian footpath and dropoff paving. Clay pavier.
 - North Hill plaza paving. Buff natural stone, such as sandstone.
 - North Hill drop-off paving. Buff natural stone, such as sandstone
 - Terrace paving - porcelain paving
 - Boardwalk - composite decking
 - Pedestrian footpaths - permeable resin bound with metal edge.
 - Ornamental planting beds with shrubs, grasses and herbaceous perennials. 3, 5 & 10L shrubs, perennials and grasses 3-7/ m2 with specimens planted as 10L.
 - Specimen trees, advanced stocksize, underground guyed. min 4.5m high.
 - Ornamental trees within healing garden, multistem specimens. min 3m high.
 - Green wall boundary to create green backdrop to private terraces. 2m high.
 - Illustrative indication of existing trees to be retained. Refer to Tree Constraints Plan by Tyler Grange.

P04 12.10.21 Roof Plan added. RM CX

Rev Date Comments Dr Ch

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landscape

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Client
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Site
**107 North Hill, Highgate,
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Drawing Title
**Illustrative Landscape
Masterplan**

Scale
1:200 @ A1

Status
Preliminary

Project Drawing Number Revision
21069 GUA-DR-L-001 P04

Drawn Checked Date
RM CX August 2021

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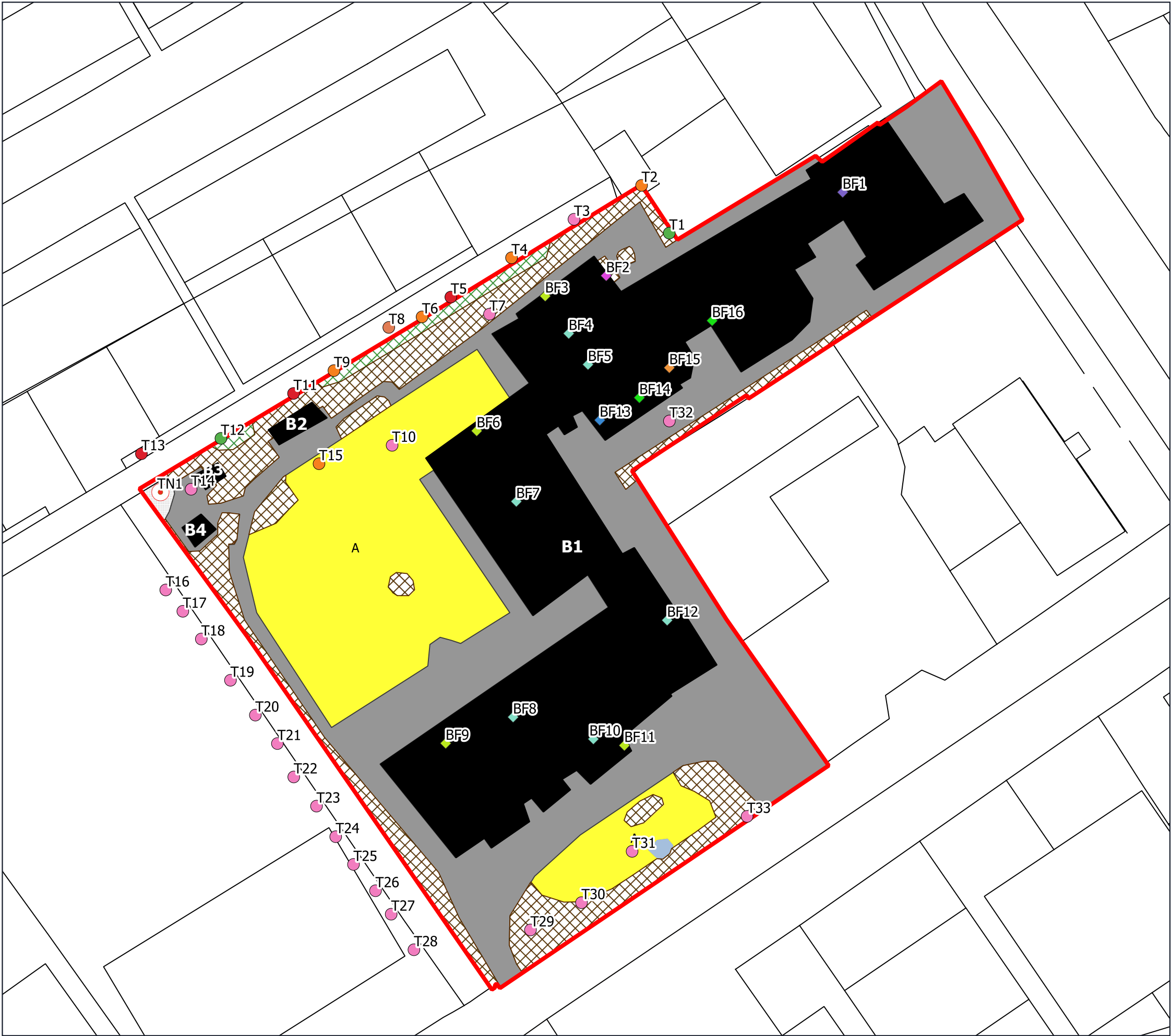
Plans:

13786/P01a: Habitat Features and Preliminary Bat Roost Assessment Plan

13786/P04: Emergence Survey Plan

13786/P05: Post-development Habitats Plan



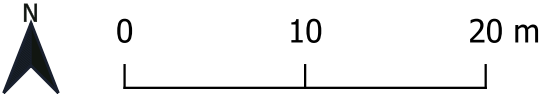


Legend:

Phase 1 Habitat Types:

- Buildings
- Hardstanding
- Amenity Grassland
- Bare ground
- Dense/continuous scrub
- Introduced shrub
- Pond
- Target note

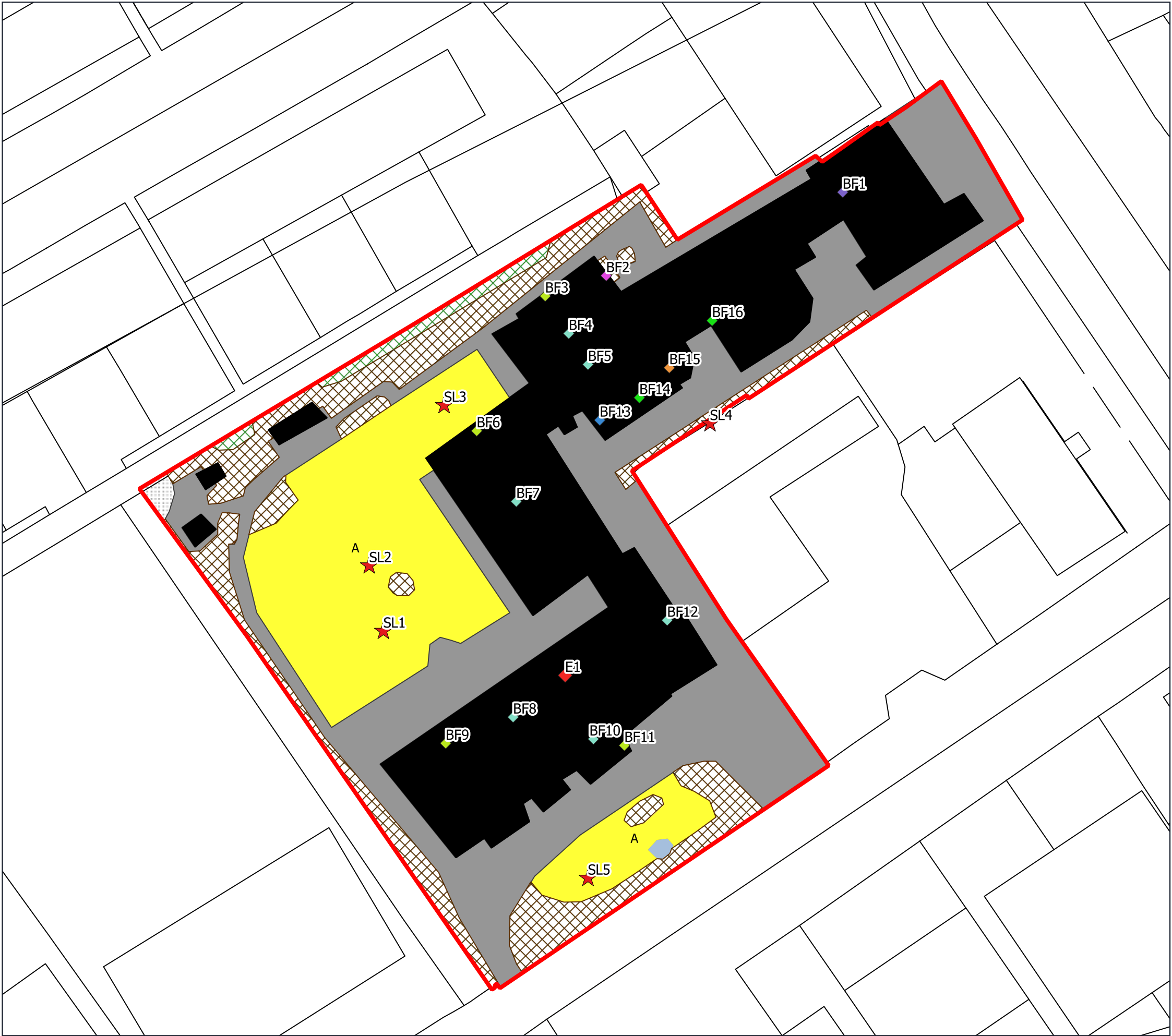
- Crevice between wall and cladding
- Crevice between wall and soffit
- Damaged soffit
- Hanging tiles
- Lifted tiles
- Lifted flashing
- PBRA results - trees:
 - Low suitability tree
 - Moderate suitability tree
 - High suitability tree
 - Negligible suitability tree
- PBRA results - building:
 - Crevice behind mounted board



Project	Mary Feilding Guild Care Home, Highgate
Drawing Title	Habitat Features and Preliminary Bat Roost Assessment Plan
Scale	As Shown (Approximate)
Drawing No.	13786/P01a
Date	19th October 2021
Checked	AP/NJ



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Legend:

Phase 1 Habitat Types:

- Buildings
- Hardstanding
- A Amenity Grassland
- Bare ground
- Dense/continuous scrub
- Introduced shrub
- Pond

PBRA results:

- Crevice behind mounted board
- Crevice between wall and cladding
- Crevice between wall and soffit
- Damaged soffit
- Hanging tiles
- Lifted tiles
- Lifted flashing

★ Emergence/re-entry surveyor locations

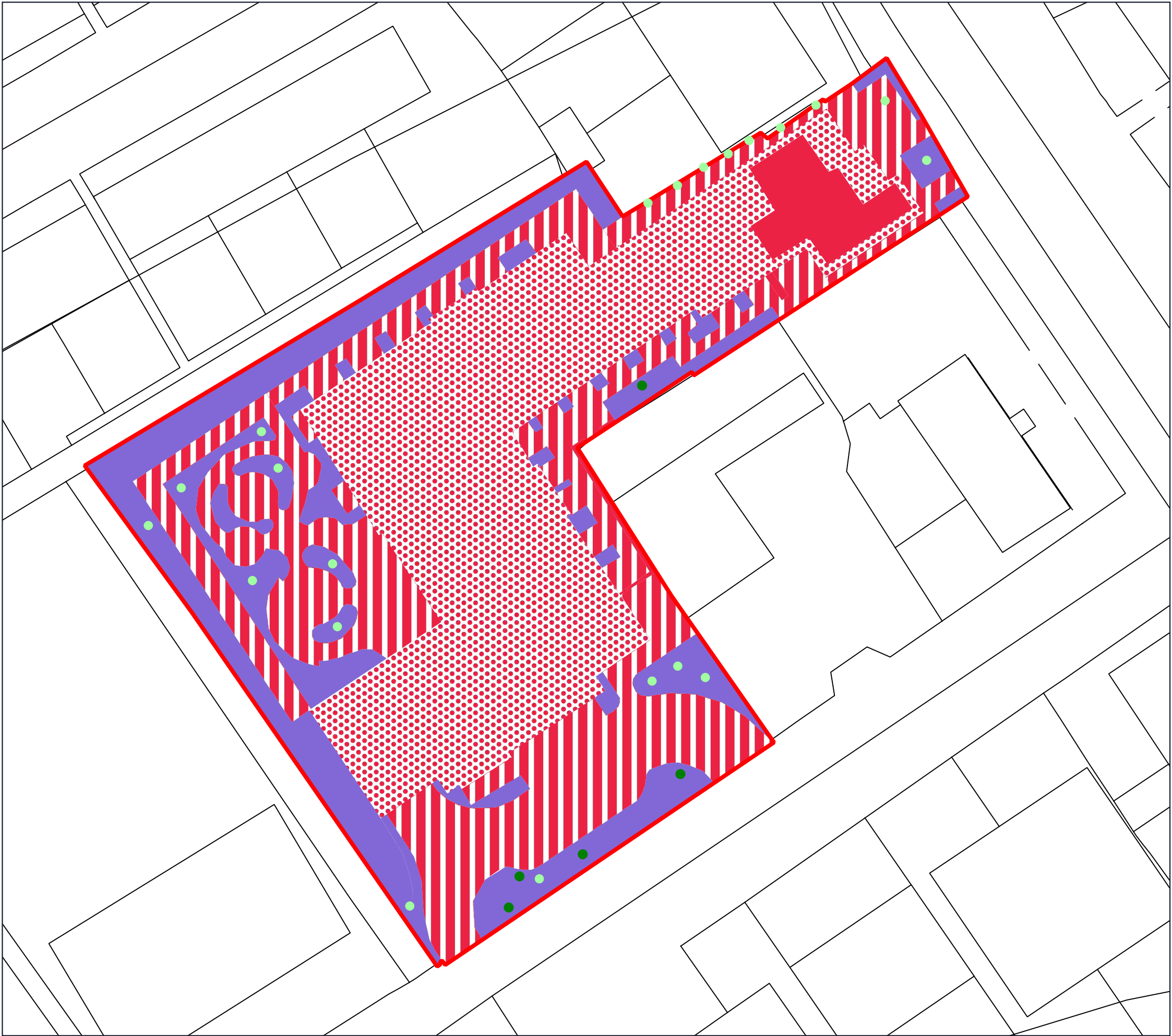


0 10 20 m

Project	Mary Feilding Guild Care Home, Highgate
Drawing Title	Emergence/re-entry survey plan
Scale	As Shown (Approximate)
Drawing No.	13786/P04
Date	19th October 2021
Checked	AP/NJ



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Legend:

UK Habitat Classification Habitat Type:

Introduced Shrub

Extensive Green Roof

Hardstanding

Buildings

Trees (locations approximate):

Retained

Planted



0 10 20 m

Project	The former Mary Feilding Guild Care Home, 103-107 North Hill, Highgate
Drawing Title	Post-development Habitat Plan
Scale	As Shown (Approximate)
Drawing No.	13786/P05
Date	22nd October 2021
Checked	AP/NJ



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