



Land off St Columba's Close, Gravesend

Preliminary Ecological Appraisal

10/10/2022



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Report Contents

1	Introduction	1
1.1	Site Description.....	1
1.2	Proposed Works.....	1
1.3	Aims of Study	1
2	Methodology	2
3	Results	3
3.1	Habitat Description	3
3.2	Protected/Notable Species.....	3
3.2.1	Bats	3
3.2.2	Breeding Birds.....	4
3.3	Designated Sites	4
4	Assessment	5
4.1	Constraints	5
4.2	Potential Impacts	5
4.2.1	Habitats	5
4.2.2	Protected/Notable Species	5
4.2.3	Designated Sites	6
4.3	Legislation and Policy.....	6
4.3.1	Bats	6
4.3.2	Breeding Birds.....	6
4.3.3	National Planning Policy Framework	6
5	Recommendations	7
5.1	Further Survey.....	7
5.1.1	Bats	7
5.2	Mitigation Measures	7
5.2.1	Habitats	7
5.2.2	Protected/Notable Species	7
5.2.3	Designated Sites	8
5.3	Enhancement Measures.....	8
6	Conclusions.....	9
7	Disclaimer	10
8	Appendices.....	11

1 Introduction

1.1 Site Description

The site is located off St Columba's Close, in the south-eastern part of Gravesend, in the County of Kent at approximate postcode DA12 4AN.

The site, which is estimated to be around 1.07 hectare in size, is centred on Ordnance Survey grid reference TQ 660 721 and comprises four residential housing blocks, along with hard standing, amenity grassland, scrub/ruderal vegetation, miscellaneous planting and scattered trees.

The land surrounding the site is suburban in character, containing residential and commercial properties, roads, amenity grassland, scattered trees and woodland. The site and surrounding area are illustrated in aerial images provided in Appendix 1 and photographs of the site are provided in Appendix 2.

1.2 Proposed Works

It is understood that the proposed works are the subject of a planning application to Gravesham Borough Council, the Local Planning Authority (LPA), for the demolition of 26 homes (including caretaker's facility) and construction of 46 new homes (including re-provision of the caretaker's facility) within two blocks of flats and two house and maisonette terraces with associated carparking and cycle storage.

1.3 Aims of Study

To inform the planning application, GreenLink Ecology Ltd. has been commissioned to conduct a Preliminary Ecological Appraisal (PEA) for the site, to include a basic desk study and a survey to identify what habitats are present and look for any evidence of, or potential for, protected/notable species and their habitats. The key objectives of the PEA are to:

- Identify likely ecological constraints associated with the proposals;
- Identify mitigation measures likely to be required;
- Identify additional surveys that may be required to inform an Ecological Impact Assessment¹ (EclA); and
- Identify potential opportunities offered by the proposals to deliver ecological enhancement.

¹ CIEEM (2018) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*. Chartered Institute of Ecology and Environmental Management, Winchester.

2 Methodology

A survey was undertaken on 11th March 2022 by experienced consultant ecologist Marcus Fry MCIEEM², in accordance with the published guidelines³. The native plant species and habitat types present were identified and any evidence of, or potential for, protected/notable species and their habitats was recorded. On the day of the survey, the weather conditions were overcast with light rain and the temperature at midday was around 8°C.

In addition, the Multi Agency Geographic Information for the Countryside (<http://magic.defra.gov.uk>) database was accessed for information relating to statutory designated sites from within the surrounding area.

² Member of the Chartered Institute of Ecology and Environmental Management (Full)

³ CIEEM (2017) *Guidelines for Preliminary Ecological Appraisal*, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

3 Results

3.1 Habitat Description

The site contains 7 no. blocks of flats, which are considered in a subsequent section, along with communal garden areas that contain hard standing, amenity grassland, scrub/ruderal vegetation, miscellaneous planting and scattered trees.

There are hard standing footpaths throughout the site, along with an access road off St Columba's Close and car parking areas. This represents an artificial habitat that is of inherently low ecological value, with no potential for protected/notable species.

Amenity grassland is the dominant habitat type and is species-poor in composition, with perennial rye-grass (*Lolium perenne*), daisy (*Bellis perennis*), dandelion (*Taraxacum officinale*), clover (*Trifolium repens*), buttercup (*Ranunculus* sp.) and yarrow (*Achillea millefolium*) recorded as present. This is a habitat type of low ecological value, with no potential for protected/notable species.

There are small amounts of scrub/ruderal vegetation present throughout the site, comprised of bramble (*Rubus fruticosus*), common nettle (*Urtica dioica*), cleavers (*Galium aparine*), wood avens (*Geum urbanum*), hedge bindweed (*Calystegia sepium*), common ivy (*Hedera helix*) and cow parsley (*Anthriscus sylvestris*). This is a habitat type of low ecological value, with limited potential for seasonal use by breeding birds.

There are small amounts of miscellaneous planting present throughout the site, comprised, predominantly of non-native ornamental species. This is a habitat type of low ecological value, with limited potential for seasonal use by breeding birds.

There are low numbers of trees scattered throughout the site, including cherry (*Prunus avium*), sycamore (*Acer pseudoplatanus*), elder (*Sambucus nigra*), ash (*Fraxinus excelsior*), lime (*Tilia x europaea*) and non-native evergreens. These represent a habitat type that is of moderate ecological value at site level, which has the potential for use by roosting bats and breeding birds.

None of the plants recorded during the survey are protected/notable species and they do not constitute habitats that are of conservation concern. It is unknown and beyond the scope of this report to establish whether the trees are covered by a Tree Preservation Order (TPO).

3.2 Protected/Notable Species

3.2.1 Bats

Since the proposals include the demolition of 4 no. blocks of flats (including 1–12, 36–41 and 28–34 and 36–42), which could directly impact upon bats, if present, these were assessed externally by Natural England licence holder Marcus Fry (no. 2015-10955-CLS), for any evidence of, or potential for bats. Features and evidence considered during the survey included:

- Roof and wall construction;
- Features that have the potential to be actual bat roosts or provide access to roosting opportunities within the buildings; and
- Scattered or accumulated bat droppings (identified by their dry, powdery texture when compressed), oily staining, scratch marks and/or urine staining around entrances to potential roosts.

In summary, there was no evidence of bats recorded during the external assessment of the buildings that are to be demolished and only 28–34 and 36–42 were considered to have any potential for use by bats, since the roof areas of 1–12 and 36–41 are intact and in reasonably good condition without missing tiles, gaps between soffits and walls etc.

The two buildings at 28–34 and 36–42 are uninhabited and in poor condition, with numerous areas of damaged cladding to the front and rear, which could be used by small species of crevice roosting bat. However, given the suburban location and general absence of semi-natural habitats in the local area that could be used by commuting/foraging bats, the building have been classified as having 'low' bat roost potential.

Since some of the scattered trees will need to be removed to facilitate the development, these were all assessed by a Natural England licence holder (no. 2015-10955-CLS) and categorised (to align with BS 8596:2015 "*Surveying for Bats in Trees and Woodland*") in accordance with the 2016 Bat Conservation Trust's (BCT) published guidance⁴:

- Negligible potential – Unlikely to be used by roosting bats.
- Low potential – A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only limited roosting potential
- Moderate potential – A 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 significance.
- High potential – A tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, protection, conditions and surrounding habitat.

In summary, all of the trees have been categorised as having 'negligible' potential for use by roosting bats on account of their immaturity and/or absence of suitable roost features. Overall, the site is considered to have limited potential for use by commuting/foraging bats, given the suburban location and general absence of semi-natural habitats in the local area.

3.2.2 Breeding Birds

There was no evidence for actively breeding birds recorded during the survey, which was undertaken relatively early in the breeding season (March-July/August), although the trees, larger shrubs within the miscellaneous planting and more established scrub/ruderal vegetation do represent potentially suitable habitats for seasonal use by nesting birds.

In addition, the two buildings at 28–34 and 36–42 have the potential for use by breeding birds, since there are numerous areas of damaged cladding to the front and rear, which could permit birds access into the fabric of the buildings.

3.3 Designated Sites

According to the Multi Agency Geographic Information for the Countryside database, the closest statutory designated site for nature conservation is circa 1.8 kilometres to the south-east of the proposed development site, which is Shorne and Ashenbank Woods Site of Special Scientific Interest (SSSI).

⁴ Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines*, Bat Conservation Trust (3rd Edition)

4 Assessment

4.1 Constraints

The survey work was undertaken by an experienced consultant ecologist using standard survey techniques, during an appropriate time of the year and in accordance with the published guidelines.

However, it was not possible to access any of the buildings' internal roof voids to look for evidence of/potential for bats and therefore, it is considered that this was a partial constraint to the PEA. To address this, further survey work is recommended in a subsequent section.

4.2 Potential Impacts

4.2.1 Habitats

The site contains common/widespread habitat types that are not of conservation concern and impacts to these habitats are considered insignificant.

On a precautionary basis, retained trees should be protected from potential impacts, as detailed in a subsequent section.

4.2.2 Protected/Notable Species

4.2.2.1 Bats

Although there was no evidence of bats recorded during the survey, it was not possible to access any roof voids and 'low' roosting potential was identified in relation to 2 no. of the buildings that are to be demolished.

Therefore, the demolition of these buildings could result in direct impacts to bats through disturbance, injury or mortality and the destruction of actual roost sites, all of which would be an offence against the legislation.

To address the partial constraint relating to a lack of access to roof voids and 'low' roosting potential associated with these buildings, further survey work is recommended in a subsequent section, to determine the need of mitigation measures.

The proposed works could actually have a positive impact for bats through the provision of wall-integrated bat boxes on the new buildings.

4.2.2.2 Breeding Birds

Although no evidence for actively breeding birds was recorded during the survey, which was undertaken outside the breeding season, potentially suitable habitats (including buildings at 28–34 and 36–42) were identified throughout the site, some of which will be removed/disturbed to facilitate the proposed works.

Therefore, breeding birds could be directly impacted on by the proposed works, if undertaken during the breeding season (March-July/August, as a guide). To avoid the seasonal risk of impacts to breeding birds, precautionary mitigation measures are recommended in a subsequent section.

The proposed works could actually have a positive impact for birds through the provision of wall-integrated bird boxes on the new buildings.

4.2.3 Designated Sites

Since the closest statutory designated site is located circa 1.8 kilometres to the south-east of the proposed development site and buffered from it by substantial areas of land, it is considered that there is no perceived risk of potential impacts to designated sites as a result of the proposed works.

4.3 Legislation and Policy

4.3.1 Bats

All species of bat and their habitats are fully protected under the Wildlife and Countryside Act 1981 (as amended by the CROW Act 2000) and by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

The legislation makes it illegal under the Wildlife and Countryside Act 1981 (as amended) to:

- Intentionally or recklessly kill, injure or take a wild bat;
- Be in possession or control of any live or dead wild bat, or any part of, or anything derived from a wild bat;
- Intentionally or recklessly damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection; and
- Intentionally or recklessly disturb any wild bat while it is occupying a structure or place that it uses for shelter or protection.

The legislation makes it illegal under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 to:

- Deliberately capture, injure or kill any wild animal of a European Protected Species;
- Deliberately disturb wild animals of any such species. Disturbance of animals includes in particular any disturbance which is likely to:
 - impair their ability -
 - to survive, to breed or reproduce, or to rear or nurture their young; or
 - in the case of animals of a hibernating or migratory species, to hibernate or migrate; or
 - to affect significantly the local distribution or abundance of the species to which they belong;
- Deliberately take or destroy the eggs of such an animal; or
- Deliberately damage or destroy a breeding site or resting place of such an animal.

4.3.2 Breeding Birds

Breeding birds are protected under the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally or recklessly kill, injure or take any wild bird or take, damage or destroy its nest whilst it is in use or being built, or to take or destroy its eggs.

4.3.3 National Planning Policy Framework

The Government revised the National Planning Policy Framework (NPPF) in July 2021. The NPPF states that when determining planning applications, LPAs should aim to conserve and enhance biodiversity by encouraging opportunities to be taken for the incorporation of biodiversity in and around developments.

5 Recommendations

5.1 Further Survey

5.1.1 Bats

In accordance with the 2016 BCT guidance, at least one survey visit should be undertaken for the 2 no. buildings at 28–34 and 36–42, which is the minimum survey effort required to have confidence in a negative result, as detailed in Table 7.3 on page 52 (summarised in Table 1 below). The survey visit should be undertaken during the optimal seasonal period, which is May to August.

Table 1: Recommended minimum number of survey visits

Low potential	Moderate potential	Confirmed/high potential
<u>One survey visit. One dusk emergence or pre-dawn re-entry survey</u>	Two survey visits. One dusk emergence and a separate pre-dawn re-entry survey	Three survey visits. At least one dusk emergence and a separate pre-dawn re-entry survey. The third visit could be either dusk or pre-dawn

This would involve experienced/licensed surveyors observing opposite aspects of the buildings under suitable climatic conditions at dusk/pre-dawn, using bat detectors to record any emerging/re-entering bats, to determine the species and numbers of individuals present and establish the roost status. It should be noted that if bats are recorded as present, at least one additional survey visit will be required, to inform a mitigation licence application.

5.2 Mitigation Measures

5.2.1 Habitats

Mitigation measures for habitats are recommended on a precautionary basis for retained trees, which should be protected in accordance with BS 5837:2012 "*Trees in Relation to Design, Demolition and Construction - Recommendations*".

Fundamentally, this should ensure that retained trees are isolated from the development site via the use of 'heras' fence panels, positioned approximately one metre below the extent of canopy spread, to avoid direct damage to the trees and to prevent the use of machinery/storage of materials within the Root Protection Area (RPA).

5.2.2 Protected/Notable Species

5.2.2.1 Bats

The full details of mitigation measures (if required) for bats will be determined further to the completion of the further survey work recommended above in Section 5.1.1.

If bats are recorded as present, a mitigation licence would need to be obtained from Natural England once planning permission has been granted and all relevant conditions discharged. The implementation of the mitigation measures may need to be seasonally timed to avoid periods of the year when bats are particularly vulnerable to impacts (e.g. avoiding summer, when bats form maternity colonies and winter, when bats hibernate).

As a guideline, mitigation measures are likely to include exclusion of bats from the buildings and subsequent dismantling of the relevant areas under the direct supervision of an appropriately experienced/licensed ecologist, prior to demolition.

5.2.2.2 Breeding Birds

The demolition of the 2 no. buildings at 28–34 and 36–42, along with the clearance of potentially suitable breeding habitat should ideally be undertaken outside of the breeding bird season (avoiding March–July/August). If it is necessary to conduct this work during the breeding season, it should be carried out under the supervision of an experienced ecologist, who will check the habitats for the presence/absence of any birds' nests.

If any active nests are found then works with the potential to impact on the nest must cease and an appropriate buffer zone should be established until the young have fledged and the nest is no longer in use.

5.2.3 Designated Sites

Since it is considered that there is no significant risk of impacts to designated sites as a result of the proposed works, mitigation measures are not required for designated sites.

5.3 Enhancement Measures

To ecologically enhance the site in accordance with the principles of the NPPF (Section 4.3.3), the following guideline measures should be implemented:

- The soft landscaping scheme for the site should specify at least 60% native species of plant, or non-native species with a known benefit to wildlife. This should include a variety of flowering plants, shrubs, climbers, hedgerows and small trees, to provide a diversity of habitat type/structure and benefit local biodiversity;
- The new buildings should incorporate at least 5 no. wall-integrated bat boxes (<http://www.birdbrickhouses.co.uk/brick-nesting-boxes/bat-box/>), which should ideally be installed at least four metres from ground level on the gable ends and not illuminated by artificial lighting; and
- The new buildings should incorporate at least 10 no. wall-integrated bird nesting boxes (<http://www.birdbrickhouses.co.uk/brick-nesting-boxes/nesting-boxes/>), which should be installed at least three metres from ground level, although in the absence of shade, none of these boxes should be facing due south, to avoid over-heating during the summer months.

6 Conclusions

To inform a planning application, GreenLink Ecology Ltd. was commissioned to undertake a PEA for the site, which has been conducted with only partial constraint relating to accessing internal roof voids.

The PEA survey that was undertaken by an experienced consultant ecologist, determined that the site contains common/widespread habitat types that are not of conservation concern and impacts to these habitats are considered insignificant. On a precautionary basis, it is recommended that retained trees are protected from potential impacts, in accordance with BS 5837:2012 *"Trees in Relation to Design, Demolition and Construction - Recommendations"*.

During the survey, there was no evidence of bats recorded and 'low' potential was identified in relation to the 2 no. buildings at 28–34 and 36-42. To inform the need for mitigation measures in relation to bats, further survey work is recommended.

Although no evidence for actively breeding birds was recorded during the survey, the site contains potentially suitable habitats for use by nesting birds during the breeding season, including the 2 no. buildings at 28–34 and 36-42. Therefore, mitigation measures have been recommended on a precautionary basis to avoid the risk of seasonal impacts to breeding birds.

Although there is a designated site for nature conservation in the local area, there is no perceived risk of impacts as a result of the proposed works and therefore, no need for mitigation measures.

In accordance with the NPPF, recommendations have also been made for ecological enhancement measures to benefit local biodiversity, in particular habitats, bats and breeding birds.

Overall, there are no known overriding ecological constraints that would prevent the proposed works going ahead, subject to the recommendations made in this report being correctly implemented.

7 Disclaimer

This report is issued to the client for their sole use and for the intended purpose as stated in the agreement between the client and GreenLink Ecology Ltd. under which this work was completed, or else as set out within this report.

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Nothing in this report constitutes legal opinion. If legal opinion is required the advice of a qualified legal professional should be secured. Observations relating to the state of built structures or trees have been made from an ecological point of view and, unless stated otherwise, do not constitute structural or arboricultural advice.

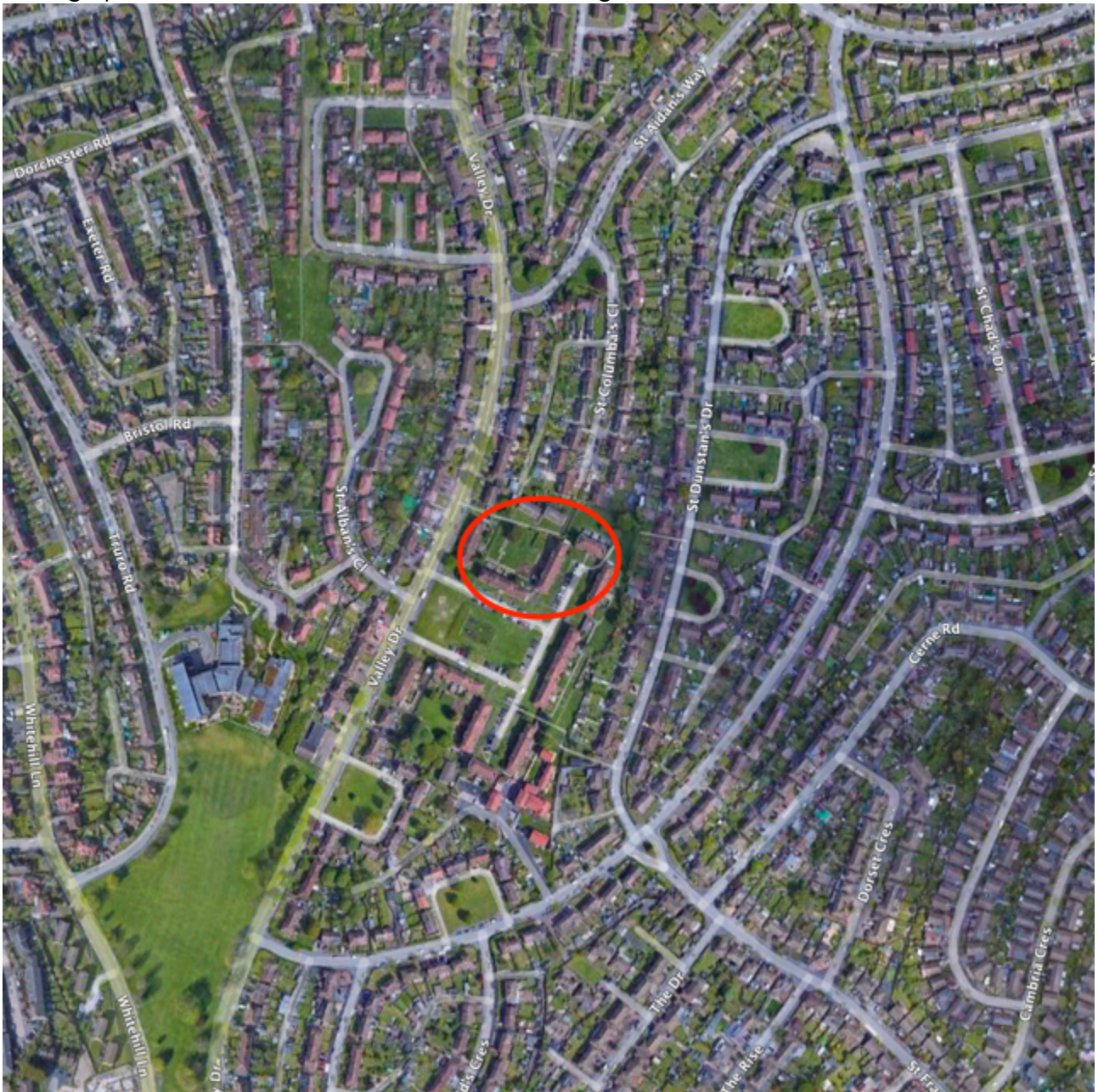
8 Appendices

Appendix 1: The site location and surrounding area

Photograph 1: The approximate site boundaries and immediate surrounding area



Photograph 2: The site location and wider surrounding area



Appendix 2: Photographs of the site

Photograph 1: View of the site from Valley Drive, looking north-east towards building 1-12



Photograph 2: View of the site from Valley Drive, looking south-east towards building 1-12



Photograph 3: View of buildings 28-34 and 36-42, front aspects looking north-east



Photograph 4: View of buildings 28-34 and 36-42, rear aspects looking south-west



Photograph 5: Rear of building 1-12, looking south-west



Photograph 6: Central grassed area, looking east



Photograph 7: View of the site from the south-east corner, looking north



Photograph 8: View of the site from the north-east corner, looking south-west

