



## **Preliminary UXO Risk Assessment**

1st Line Defence Limited Unit 3, Maple Park, Essex Road, Hoddesdon, Herts, EN11 0EX Tel: +44 (0)1992 245 020 E-mail: <u>info@1stlinedefence.co.uk</u> Company No: 7717863 VAT No: 128 8833 79

www.1stlinedefence.co.uk

Client	Geotechnical and Environmental Associates
Project	Camley Street and Cedar Way, London
Site Address	120-136 Camley Street and 3-30 Cedar Way, London N1C 4PG
Report Reference	PA17853-00
Date	02/05/23
Authored by	НҮ
Quality Assurance	AT

#### **Assessment Objective**

This preliminary risk assessment is a qualitative screening exercise to assess the likely potential of encountering unexploded ordnance (UXO) at the Camley Road and Cedar Way, London site. The assessment involves the consideration of the basic factors that affect the potential for UXO to be present at a site as outlined in Stage One of the UXO risk management process.

#### Background

This assessment uses the sources of information available in-house to  $1^{st}$  Line Defence Ltd to enable the placement of a development site in context with events that may have led to the presence of German air-delivered or Allied military UXO. The report will identify any immediate necessity for risk mitigation or additional research in the form of a Detailed UXO Risk Assessment. It makes use of  $1^{st}$  Line Defence's extensive historical archives, library and unique geo-databases, as well as internet resources, and is researched and compiled by UXO specialists and graduate researchers.

The assessment directly follows CIRIA C681 guidelines "Unexploded Ordnance, a Guide for the Construction Industry". The document will therefore assess the following factors:

- Basic Site Data
- Previous Military Use
- Indicators of potential aerial delivered UXO threat
- Consideration of any Mitigating Factors
- Extent of Proposed Intrusive Works
- Any requirement for Further Work

It should be noted that the vast majority of construction sites in the UK will have a low or negligible risk of encountering UXO and should be able to be screened out at this preliminary stage. The report is meant as a common sense 'first step' in the UXO risk management process. The content of the report and conclusions drawn are based on basic, preliminary research using the information available to 1<sup>st</sup> Line Defence at the time this report was produced. It should be noted that the only way to entirely negate risk from UXO to a project would be to support the works proposed with appropriate UXO risk mitigation measures. It is rarely possible to state that there is absolutely 'no' risk from UXO to a project.





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Risk Assessment Considerations		
Site location and description/current use	The site is located in the London Borough of St Pancras. The site comprises two halves, intersected by railway lines. The southern section has been labelled as <i>A</i> , and the northern section as <i>B</i> . Aerial imaginary shows that the site half labelled <i>A</i> comprises several large commercial structures and hardstanding paved ground. The half labelled <i>B</i> additionally comprises multiple mixed use commercial structures. The site <i>A</i> is bordered to the north and east by train tracks, to the south by <i>Cedar way</i> and further commercial properties and finally to the west by <i>Camley Street</i> . The site labelled <i>B</i> is bound by the north by <i>Agar Grove</i> . To the east and south the site is bound by train tracks, and to the west by <i>Camley Street</i> . The site half marked as <i>A</i> is approximately centred on the OS grid reference: <b>TQ 29721 84014</b> and the site half marked <i>B</i> is approximately centred on the OS grid reference: <b>TQ 29765</b> <b>84199</b> .	
Are there any indicators of current/historical military activity on/close to the site?	In house records suggests no indication of current or historical military use on or close to the site boundary. No features such as WWII defensive positions, encampments or firing ranges are recorded to have been located at or in the immediate vicinity of the site. In addition, no information of ordnance being stored, produced, or disposed of within the proposed site boundary could be found. The closest recorded Heavy Anti-Aircraft (HAA) battery was situated approximately 2.8km north-west of the boundary. The conditions in which unexploded anti-aircraft ordnance may have fallen unrecorded within the proposed site are analogous to that of aerially delivered Luftwaffe bombs.	
What was the pre- and post- WWII history of the site?	Pre-war OS mapping dated 1938 shows the site labelled <b>B</b> to comprise train tracks. It is bound to the north and west by roadway and to the east and south by railway. The site labelled as <b>A</b> compromises railway tracks in its northern half and in its southern is occupied by a large structure recorded as 'Goods Depot'. It is bound to the north, east and west by train tracks and to the south sits the rest of the structure labelled 'Goods Depot'. Post-war OS mapping dated 1953 indicated little structural changes within the site boundary. Both halves of the site remain occupied by train tracks, with site A comprising the 'Goods Depot'. The areas surrounding the site footprint further shows few structural changes.	





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Was the area subject to bombing during WWII?	During WWII the site was situated within the London Borough of St Pancras, which sustained a very high bombing density according to official Home Office bombing statistics, with an average of 258.4 items of ordnance recorded per 1,000 acres. This includes 641 HE (high explosive) bombs, eight parachute mines, 14 oil bombs, 11 phosphorous bombs, 20 V-1 pilotless aircraft and 2 V-2 long range rocket bombs, totalling 696 incidents across 2,694 acres. Ministry of Home Security bomb census mapping plots one HE strike on the south-eastern boundary of the site labelled <b>B</b> , with one additional strike to the east and one to the west of the boundary between the 21 <sup>st</sup> and 28 <sup>th</sup> of October 1940.
Is there any evidence of bomb damage on/close to the site?	London County Council bomb damage mapping does not record damage to the on-site commercial structure or railway tracks. Structures to the west of the site labelled <b>A</b> , is recorded as a 'clearance area' by the War Debris Survey and Disposal Service.
To what degree would the site have been subject to access?	As the site comprised a large commercial structure and other key infrastructure such as railway tracks, access to the site is anticipated to have been frequent at the outbreak of WWII. Access to sections of the site may however have been disrupted for a longer period in areas of particularly severe damage, prior to their repair. Although access is anticipated to have resumed once enemy action had ceased, subsequent bombing in these areas is less likely to have been observed during the same raid.
To what degree has the site been developed post-WWII?	The site has undergone extensive post-war development given that it no longer comprises railway tracks but hardstanding, paved ground with multiple commercial structures and access roads on both of the site halves. OS mapping shows these changes to have occurred between 1971 and 1980, with development of the wider site vicinity occurring prior to 1985.
What is the nature and extent of the intrusive works proposed?	The exact nature of the proposed site works were unavailable at the time of writing.

#### **Summary and Conclusions**

During WWII, the site was situated within the Metropolitan Borough of St Pancras which sustained a very high bombing density according to official Home Office bombing statistics with an average of 258.4 items of ordnance recorded per 1,000 acres. Bomb Census mapping records one HE bomb strike on the proposed site boundary, with two additional HE strikes within the immediate vicinity of the site. A 'clearance area' is recorded to the west of the site in London County Council bomb damage mapping.

Areas covered by structures, such as the site south, are largely conducive to the observation of UXO, with any UXBs likely to leave clear evidence. Any heavy damage within the site is likely to have been cleared quickly in order to keep the depot and tracks in working order, however UXBs falling during the same raids, after damage was sustained, may have gone missing amongst debris. Access to such locations is also likely to have been temporarily reduced during enemy action, and subsequent bombing in already damaged areas may not have been observed, increasing the risk that a UXB could have fallen unnoticed amongst debris.





#### Recommendations

Given the findings of this preliminary report, it is recommended that **further research** is undertaken in the form of a **Detailed UXO Risk Assessment.** This would allow for a more comprehensive analysis of the risk of UXO on site. Further research would involve the attempted acquisition of any available written local bombing records, WWII-era aerial photography and other archival material.

Prior to or in lieu of a Detailed Assessment, it is recommended that appropriate UXO Risk Mitigation Measures are provided for intrusive works proposed.

If the client has any anecdotal or empirical evidence of UXO risk on site, please contact 1st Line Defence.





## Herts:

Widbury Barn Widbury Hill Ware Hertfordshire SG12 7QE tel 01727 824666 mail@gea-ltd.co.uk

#### Notts:

Church Farm Gotham Road Kingston on Soar Notts NG11 ODE tel 01509 674888 midlands@gea-ltd.co.uk

## Manchester:

Peter House Oxford Street Manchester M1 5AN tel 0161 209 3032 mail @ gea-ltd.co.uk

www.gea-ltd.co.uk

**120–136 Camley Street & 3-30 Cedar Way** | Ballymore (Camley Street) Limited & London Borough of Camden | EIA Scoping Report

# Appendix C: Preliminary Ecological Appraisal







# **Preliminary Ecology Assessment**

# Sites at Camley Street, Camden, London



Report prepared by: Peter Massini MCIEEM Date: 3rd<sup>st</sup> April 2021

## **Executive Summary**

This Preliminary Ecological Appraisal was undertaken to:

- identify any likely ecological constraints associated with a project<sup>1</sup>;
- identify any mitigation measures likely to be required;
- identify if any additional surveys may be required; and
- identify the opportunities offered by a project to deliver ecological enhancement

It shows that:

- neither site is likely to support protected or notable species;
- both proposed development sites have low ecological value;
- most of the habitats in the surrounding area, with the exception of the rail corridor that separates the two sites, are also of low ecological value;
- the rail corridor is a borough level Site of Importance for Nature Conservation; this, combined with a relatively large number of mature and semi-mature trees in the residential areas to the west of both sites, provides habitat for a range of common birds and invertebrates, and a foraging area for common species of bat.

### **Recommendations**

No further ecological surveys are required.

Other than mature trees, none of the existing vegetation on either site needs to be safeguarded for nature conservation reasons.

The ecology of both sites, and the wider area, can be improved through:

- landscaping that strengthens the east-west ecological corridor provided by the London Overground rail line and mature trees north of Elm Village, including Elm Village Open Space
- remodelling Camley Street itself to enable the existing canopy of mature trees (south of the London Overground rail corridor) to be augmented by additional planting and continuing this theme north of the London Overground by reconfiguring the pedestrian/cycle route to allow for a green link through to Agar Grove.
- installation of biodiverse green roofs to complement biodiverse green roofs already installed on new developments at Kings Cross and at the intersection between Camley Street and the Regent's Canal.

<sup>&</sup>lt;sup>1</sup> Such as the presence of, or proximity to: legally protected sites (such as Sites of Special Scientific Interest); non-statutory nature conservation sites identified in the Local Plan; ancient woodlands and priority habitats; protected species; and notable species.

## 1 Introduction

- 1.1 A Preliminary Ecological Assessment is a review of the ecological features present, or potentially present, within a site and its surrounding area. Its purpose is to:
  - identify any likely ecological constraints associated with a project<sup>2</sup>;
  - identify any mitigation measures likely to be required;
  - identify if any additional surveys may be required; and
  - identify the opportunities offered by a project to deliver ecological enhancement.
- 1.2 The assessment was undertaken by Peter Massini, Associate Technical Director, London Wildlife Trust Consultancy. He is a member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

## 2 The sites

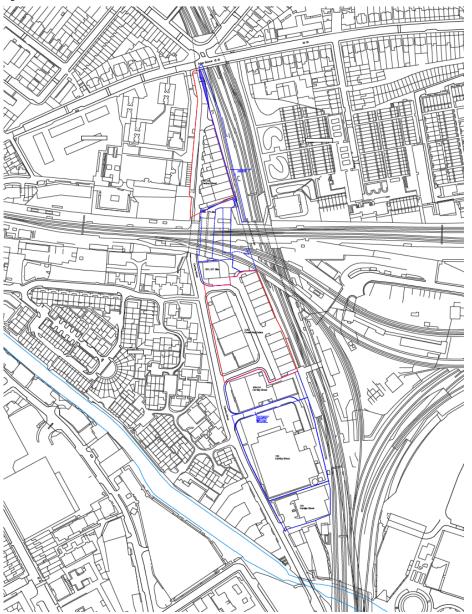
2.1 The sites are both located on Camley Street in the London Borough of Camden. The location of both sites is shown in Figure 1. Site A is 120-136 Camley Street; site B is 3-30 Cedar Way. Both are light industrial sites; site A comprising mostly car repair workshops, and site B comprising warehousing and distribution units. The Midland main line railway corridor runs along the eastern boundary of both sites and existing residential development lies to the west. The two sites are separated by the London Overground rail corridor.



2.2 The proposal is to redevelop both sites for residential development. Figure 2 shows the red line boundary of both sites.

<sup>&</sup>lt;sup>2</sup> Such as the presence of, or proximity to: legally protected sites (such as Sites of Special Scientific Interest); non-statutory nature conservation sites identified in the Local Plan; ancient woodlands and priority habitats; protected species; and notable species.

Fig.2 - red line boundaries



## 3 Approach to assessment

- 3.1 An initial desk-top review was undertaken to identify any existing or high priority ecological assets within 500m of the boundary of both sites.
- 3.2 There are no legally protected sites (e.g. Sites of Special Scientific Interest) within the 500m search area. However, four non-statutory sites are within 500m. These are Sites of Importance for Nature Conservation (SINCs) which are divided into Metropolitan, Borough and Local SINCs depending on their relative importance. The SINCs within 500m, shown in Figure 3, are:
  - North London Line rail corridor (Site of Borough Importance) 65m to the north-east of Cedar Way and 75m to the south-east of 120-136 Camley Street;
  - Regent's Canal (part of London's Canals Site of Metropolitan Importance) 200m to the south-west of 3-30 Cedar Way at its closest point;

- St Pancras Gardens (Site of Borough Importance) 450m to the south of 3-30 Cedar Way;
- Camley Street Natural Park (Site of Metropolitan Importance) 500m to the south east of 3-30 Cedar Way.

Fig.3 SINCS within 500m of both sites



- 3.3 Due to the lack of any meaningful ecological connectivity between the development sites and the Regent's Canal, St Pancras Gardens, and Camley Street Natural Park SINCs, only the proximity of the North London line rail corridor SINC has relevance to the ecological design of the proposed development sites. This SINC is described in more detail in 4.4 below. A citation and map of the SINC is provided in Appendix 1.
- 3.4 A site visit was undertaken on 30<sup>th</sup> March 2021. Although this is at the very beginning of the typical period for field surveys (April September) this was considered appropriate due to the site context. The weather was bright and sunny with a temperature c. 12°C. Images in this report were taken on the day of the site visit.

## 4 Results of assessment

### General description of sites

4.1 Both sites are light industrial developments, comprising workshops and warehousing. 120-136 Camley Street is almost entirely covered by existing buildings, an access road and a cycle/pedestrian route through to Agar Grove. The vegetation on site is limited to two mature trees, an area of scrub and 'gardened' land in the northern tip of the site, and a narrow strip of vegetation between Camley Street and a brick wall marking the boundary with the neighbouring Agar Grove estate. The vegetated parts of 3-30 Cedar Way include areas of landscaped amenity space along the frontage with Camley Street, and strips of ruderal vegetation around the periphery of the site. These habitats are described in more detail below.

## Habitats on site

- 4.2 <u>120-136 Camley Street</u>: two mature London Plane (*Platanus x hispanica*) in the centre of the site, two self-sown tree of heaven (*Ailanthus altissima*) on each of the northern and southern boundaries of the site, plus scrub comprising goat willow (*Salix caprea*), sycamore (*Acer pseudoplatanus*), and butterfly bush (*Buddleia davidii*) at the northern tip of the site. This area has also been subject to some 'gardening' although at the time of the survey much of the area below the self-sown scrub was compacted bare ground. The narrow strip of vegetation between Camley Street and the Agar Grove estate consists mostly of ruderal (weedy) plants such as red valerian (*Centranthus ruber*), bramble (*Rubus fruticosus*), michelmas daisy (*Aster amellus*), cleavers (*Gallium aparine*), petty spurge (*Euphorbia peplus*) and butterfly bush (*Buddleia davidii*). The pedestrian/cycle route to Agar Grove is almost devoid of vegetation. See images 1 and 4 in Appendix 2.
- 4.3 <u>3-30 Cedar Way</u>: the amenity green space between Camley Street and the warehousing in Cedar Way comprises various planted trees including: varieties of oak (*Quercus*), birch (*Betula*) and ash (*Fraxinus*), cherry (*Prunus*) and maple (*Acer*), and shrubs including hazel (*Corylus*), holly (*Ilex*) and firethorn (*Berberis*). On the largest area of amenity green space at the junction of Camley Street and the southern access road into Cedar Way, a small orchard has been planted comprising mainly of apple (*Malus domestica*) see image 5 in Appendix 2. Beneath the trees is a rough-mown weedy grassland including typical ruderal species such as common mallow (*Malva sylvestris*), nettle (*Urtica dioica*), dandelion (*Taraxacum officinalis*), lesser burdock (*Arctium lappa*) and chickweed (*Stellaria media*). Around the periphery of the site are small areas of partly vegetated waste-ground, with species such as pellitory-of-the-wall (*Parietaria judaica*), sow thistle (*Sonchus arvensis*), groundsel (Senecio vulgaris) and red deadnettle (*Lamium purpureum*).

## Habitats in surrounding area

4.4 The two sites are separated by the London Overground rail corridor (formerly the North London Line). The railside habitat is dominated by scrub and secondary woodland comprising buddleia, sycamore, silver birch, goat willow and ivy (*Hedera helix*). Patches of rough grassland and ruderal habitats along the edges of the railway lines themselves but the composition of this habitat cannot be determined due to lack of access. Larger trees such as grey poplar (*Populus x canascens*) occur in places along the base of the embankment – see image 6 in Appendix 2. The mainline rail corridor which runs along the eastern boundary of both sites is largely devoid of vegetation.

4.5 To the west of both sites are residential areas. The residential land to the west of 120-136 Camley Street comprises a 1960's housing estate (currently undergoing redevelopment) which has a typical amenity landscape of scattered amenity trees and mown grassland with negligible ecological value. The residential land to the west of 3- 30 Cedar Way is a 1980's estate with amenity landscaping comprising retained specimen and quite dense planting of amenity trees and shrubberies. Although not of significant ecological value the landscaping here provides reasonably good habitat for a range of common birds such as blackbird (*Turdus merula*), robin (*Erithacus rubecula*), blue tit (*Cyanistes caeruleus*) and great tit (*Parus major*). See image 7 in Appendix 2.

#### Protected or notable species<sup>3</sup>

- 4.6 Neither site has habitats or features that are likely to provide breeding, hibernating or roosting opportunities for specially protected species such as bats, reptiles or Schedule 1 birds.
- 4.7 The habitats present on site and in the surrounding area are unlikely to support any notable species.
- 4.8 It is possible that common species of bat, such as common pipistrelle (*Pipistrellus pipistrellus*) forage in the surrounding residential areas and along the London Overground rail corridor. However, the development proposal is confined to the area already occupied by buildings and hardstanding and is unlikely to result in any significant loss of foraging habitat.

#### **Overall site assessment**

- 4.9 Both sites have low ecological value and most of the habitats in the surrounding area, with the exception of the rail corridor, are also of low ecological value.
- 4.10 However, the sites lie adjacent to the rail corridor SINC and residential areas with a relatively large number of mature and semi-mature trees and amenity planting. These provides habitat for a range of common birds and invertebrates and a foraging area for common species of bat.

<sup>&</sup>lt;sup>3</sup> Certain species are protected by law under the provisions of the Wildlife and Countryside Act 1981, and other relevant legislation. Protected species include: all species of bats and reptiles, badgers, dormice, and birds - especially those, such as kingfisher and barn owl that are listed under Schedule 1 of the Act. Protected species are a material consideration in the planning process and so the effect of development on protected species will be considered by the planning authority when determining planning applications.

Other species which are of rare of declining, but which are not protected by law, are listed as notable species. The local planning authority can also take these into account when determining planning applications if they have relevant policies in their Local Plan.

## **5** Conclusions and Recommendations

- 5.1 No further ecological surveys are required.
- 5.2 No trees or other vegetation on either site requires safeguarding for their intrinsic nature conservation value. However, some or all of the most mature trees should be retained, where possible, as they provide foraging areas and stepping stones for common species of bird and bats. A detailed arboricultural survey will help to determine which trees are of most value.
- 5.3 The design of the scheme and the associated landscape framework should make the most of the ecological corridor provided by the London Overground rail line, and concentrate any terrestrial landscaping in the southern part of the 120-136 Camley Street site and the northern part of the 3-30 Cedar Way site. The existing tree and scrub habitat along the rail corridor is comprised of relatively few species, therefore trees and shrubs bearing spring flowers and winter berries such as rowan (*Sorbus aucuparia*), elder (*Sambucus nigra*) and dogwood (*Cornus sanguinea*) would provide additional foraging opportunities for common species of butterfly, bee and moth, and common species of bird.
- 5.4 The northern part of the London Overground rail corridor is proposed to become the Camden High line, a linear park between Camden Gardens and York Way<sup>4</sup>. James Corner Field Operations, in association with vPPR Architects and Piet Oudolf Gardens and Landscapes, has been commissioned to design the scheme. Initial concepts include proposals for a mix of existing vegetation and complementary horticultural planting. The palette of planting for the Camley Street sites should be informed by (an influence) those proposed for the Camden Highline.
- 5.5 Camley Street itself, with its semi-mature London Plane trees, flanked by dense planting in the Elm Village estate and fruit trees planted in the amenity spaces adjacent to 3-30 Cedar Way and the Booker warehouse to the south, also provides an useful ecological corridor, albeit of less significance than the railway corridor. See images 5 9 in Appendix 2. This could be improved by a landscape treatment that helps to unify the planting either side of the street to create a more coherent and permeable public realm, and small scale ecological improvements such as creation rain-gardens and planting of patches of pollinator friendly plants.
- 5.6 The regeneration schemes at King's Cross goodsyard to the east, Agar Grove to the west and a cluster of projects along the Regent's Canal all include green roofs to provide habitat that mimic that lost through the redevelopment of former railway sidings and canalside wastelands. The developments at 120-136 Camley Street and 3-30 Cedar Way provide an opportunity to increase this habitat type and green roofs here should comprise an open mosaic of flowering plants including species such as viper's bugloss (*Echium vulgare*), bird'sfoot trefoil (*Lotus corniculatus*), biting stonecrop (*Sedum acre*), wild marjoram (*Origanum vulgare*), yellow toadflax (*Linaria vulgaris*), and kidney vetch (*Anthyllis vulneraria*) with patches of bare sand and occasional logs to provide a variety of niches. See reference in Figure 4.

<sup>&</sup>lt;sup>4</sup> <u>https://www.camdenhighline.com/</u>

Fig. 4 green roof with sand mound in open mosaic habitat



## **APPENDIX 1**

## **Citation and map of North London Line Borough SINC**

LB Camden SINC Review London Wildlife Trust September 2014

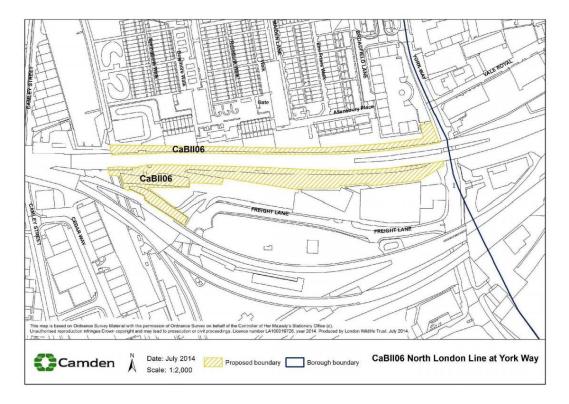
Site of Borough Grade II Importance for Nature Conservation		
Site Reference:	CaBII06	
Site Name:	North London Line at York Way	
Summary:	A small area of wildlife habitat along the railway line, left over from development of the King's Cross Goods Yard.	
Grid ref:	TQ 299 841	
Area (ha):	1.08	
Borough(s):	Camden	
Habitat(s):	Roughland, Ruderals, Scattered trees, Scrub, Semi-improved neutral grassland, Tall herbs	
Access:	No public access	
Ownership:	Network Rail	

#### Site Description:

This area is all that remains of the extensive 'wasteland' habitats of the former King's Cross Goods Yard, most of which has been redeveloped. The surviving habitat is still of importance in a borough context and links in with a larger area of trackside in Islington, known as Copenhagen Junction.

Much of the area is covered in scrub of butterfly bush (Buddleja davidii) and bramble with scattered trees of silver birch and sycamore although there are significant areas of semi-improved neutral grassland and roughland habitat supporting a variety of typical wasteland grasses and wildflowers including herb-robert (Geranium robertianum). This site is most likely very attractive to butterflies and other invertebrates. Railway safety and operational efficiency must, of course, be the primary concerns in managing railsides, but nature conservation should also be taken into account.

There is no public access to the linesides, but they can be seen from trains between Camden Road and Caledonian Road & Barnsbury.



## **APPENDIX 2**

## Site Images

1. Two mature London Planes at 120-136 Camley Street



2. Scrub and gardened land

3. Ruderal strip





5. Planted 'orchard' at Camley Street/Cedar Way junction



6. Mature trees adjacent to railway embankment

