

Confidential

BOURNE ESTATE (SOUTH)

REGENERATION

**EXTENDED PHASE 1 HABITAT
SURVEY**



For



Project No:

10907

November 2012

Campbell Reith Hill LLP
Raven House
29 Linkfield Lane
Redhill
Surrey
RH1 1SS

Tel: 01737 784500
Fax: 01737 784501
www.campbellreith.com

Document History and Status

Revision	Date	Purpose/Status	Author	File Ref	Check	Review
D1	03/09/2012	Draft	EJ	EJrj10907-030912 – Extended Phase 1 Habitat Survey D1.doc	AD	AD
F1	07/11/12	Final	EJ	EJrj10907-071112 – Extended Phase 1 Habitat Survey F1.doc	AD	AD
F2	13/11/12	Final	EJ	EJrj10907-131112 – Extended Phase 1 Habitat Survey F2.doc	AD	AD

This document has been prepared in accordance with the scope of CampbellReith's appointment with its client and is subject to the terms of the appointment. It is addressed to and for the sole use and reliance of CampbellReith's client. CampbellReith accepts no liability for any use of this document other than by its client and only for the purposes, stated in the document, for which it was prepared and provided. No person other than the client may copy (in whole or in part) use or rely on the contents of this document, without the prior written permission of Campbell Reith Hill LLP. Any advice, opinions, or recommendations within this document should be read and relied upon only in the context of the document as a whole. The contents of this document are not to be construed as providing legal, business or tax advice or opinion.

© Campbell Reith Hill LLP 2010

Document Details

Last saved	07/11/12
Path	I:\Documents\10750 - 10999\10907 - Tybalds and Bourne\CR Docs\Reports\Bourne Ecological Reports
Author	Ellen Jones
Project Partner	David Innes
Project Number	10907
Project Name	Bourne Estate, Holborn

Contents

1.0	INTRODUCTION	4
2.0	SUMMARY AND CONCLUSIONS	5
3.0	RECOMMENDATIONS	7
	APPENDIX A: EXTENDED PHASE 1 HABITAT SURVEY (MIDDLEMARCH ENVIRONMENTAL LTD)	9

1.0 INTRODUCTION

- 1.1. Middlemarch Environmental Ltd ('Middlemarch') was commissioned by Campbell Reith Hill LLP ('CampbellReith') on behalf of the London Borough of Camden to undertake an initial ecological appraisal of the Bourne Estate, Holborn, situated in the London Borough of Camden. To fulfil this brief an initial ecological desk study and Extended Phase 1 Habitat Survey was undertaken.
- 1.2. It is understood that the proposals for the site include the demolition of the community centre and associated buildings in the centre of the site, demolition of Mawson House in the south east of the site, and the construction of new residential dwellings in their place.
- 1.3. At the time of the survey the site was dominated by hardstanding with a number of buildings and areas of amenity grassland, shrub beds and scattered trees. Additional habitats recorded included dense scrub and species poor defunct hedgerow.
- 1.4. A desk study was undertaken to determine the presence of any designated nature conservation sites and protected species that have been recorded within a 1 km radius of the site. This involved contacting appropriate statutory and non-statutory organisations which hold ecological data relating to the survey area.
- 1.5. The Extended Phase 1 Habitat Survey was conducted following the methodology of the Joint Nature Conservation Committee (JNCC, 1993) as modified by the Institute of Environmental Assessment (IEA, 1995). The aim of the Phase 1 Habitat Survey is to provide a record of habitats that are present on the site and it is recognised as a standard technique for classifying and mapping British habitats.
- 1.6. The Extended Phase 1 Habitat Survey can be found in Appendix A.

2.0 SUMMARY AND CONCLUSIONS

- 2.1. For the purpose of this report, the following section outlines the main findings that are of notable consideration.
- 2.2. The desk study identified that there were no sites subject to statutory protection and twelve sites subject to non-statutory protection within 1 km radius of the proposed development site. The nearest of these is St John's Gardens which is situated 370 m east of the site. As a result of the distances involved and the built up nature of the intervening habitats, no impact to this or any of the remaining conservation sites is anticipated as a result of the proposed development.

HABITATS

- 2.3. Several trees recorded at the site were mature. These mature trees are of considerable value and cannot be replaced if lost. The indicative development proposals indicate that a number of trees will be lost as a part of the development. If the mature trees were lost, suitable mitigation planting would need to be reinstated to reduce the impact.
- 2.4. The development proposals will result in the loss of small areas of urban green space. As natural habitats (grassland, trees, hedgerows, shrubs and scrub) are all included within the "Parks and Urban Green Spaces" habitat action plan, appropriate enhancement measures to existing green spaces and the creation of new green areas will be required to mitigate the impact of the loss of these areas from the development.

PROTECTED / NOTABLE SPECIES

Bats

- 2.5. The desk study identified records of three bat species within the search area which were all in excess of 500m from the proposed development site. The two high-rise buildings on the site offer negligible potential for roosting bats, however, the community centre building does offer roosting potential, although there was no evidence that the bats were using the building at the time.
- 2.6. The shrubs, trees and scrub featured at the proposed development site could also provide foraging habitat for bats, however, any loss or change made to the existing garden

habitats would not adversely affect the bats, due to the residential surroundings with ample areas of alternative foraging habitat.

Terrestrial foraging mammals

- 2.7. The survey area may be utilised by foraging mammals such as fox *Vulpes Vulpes* and hedgehog *Erinaceus europaeus*. The development will have no long-term impact of the population of these animals given the current site usage and nature of the proposed development works.

Birds

- 2.8. Records of black redstart and peregrine falcon, which are listed on Schedule 1 of the Wildlife and Countryside Act and on the local Biodiversity Action Plan, were noted from the desk study. The proposed development site offers no suitable habitat for black redstart. No peregrine falcons were identified during the survey, however, the buildings within the site area did offer potential nesting locations.
- 2.9. Numerous birds were identified by the field survey and desk study. A number of habitats on site could support these nesting birds as well as a range of other common bird species e.g. introduced shrub beds, scattered trees and dense scrub. If the works are undertaken in the bird nesting season (March – September) there is the potential for impact upon nesting birds. Due to the presence of a large range of alternative nesting areas and vegetation within the local vicinity, it is acknowledged that the works should not adversely affect nesting birds in the long term.

3.0 RECOMMENDATIONS

HABITATS

3.1. The following recommendations are made regarding the habitats present on site:

- **Habitat Loss:** In accordance with the provision of Chapter 11 of the National Planning Policy Framework (Conserving and Enhancing the Natural Environment) and Local Planning Policy, a biodiversity enhancement plan should be incorporated into the landscaping scheme of any proposed works to maximise the ecological value of the site. This will involve, for example:
 - Planting native flowers and seed/fruit bearing species which will be of value to wildlife including cornflower which is on the local BAP and located within 1 km of the site.
 - Planting plant species which attract night flying insects which will be of value to foraging bats. Species include evening primrose *Oenothera biennis*, goldenrod *Solidago virgaurea*, honeysuckle *Lonicera periclymenum* and fleabane *Pulicaria dysenterica*.
 - Inclusion of log piles to provide habitat for amphibians and invertebrates such as stag beetles.
 - Inclusion of hedgehog passes under any fence lines to allow connectivity between garden habitats.
 - The provision of one peregrine nest-box, or specially designed ledge or recess to provide a safe platform for a nest, as part of the design of new tall buildings.
- **Trees:** Any trees and/or hedgerows on site, or overhanging the site, which are not to be removed as a part of any proposed works should be protected in accordance with British Standard 5837: 2012 "Trees in relation to design, demolition and construction - recommendations". Protection should be installed on site prior to the commencement of any works on site.

PROTECTED / NOTABLE SPECIES

3.2. The following recommendations are made regarding protected species that are potentially present on site:

-
- **Bats:** If the community building has not been demolished by May 2013 then it should be subject to a detailed bat inspection to ensure no bats have occupied the building since the April 2012 survey. Initial bat surveys can be completed at any time of year. Should these initial surveys recommend that further activity surveys are required; these further surveys can be undertaken during suitable weather conditions between May and September (inclusive). Ideal activity survey times are in suitable weather conditions between May and August, however surveys in September may be possible but consultation with Natural England / Local Planning Authority is recommended.
 - **Nesting Birds (including peregrine falcon):** To ensure compliance with the Wildlife and Countryside Act 1981 (as amended), vegetation clearance and building demolition should be undertaken outside the nesting bird season. The nesting bird season is weather dependent but generally extends between March and September inclusive. If this is not possible then any vegetation that is to be removed or disturbed or buildings to be demolished should be checked by an experienced ecologist for nesting birds immediately prior to works commencing. If birds are found to be nesting any works which may affect them would have to be delayed until the young have fledged and the nest has been abandoned naturally.
 - **Foraging Mammals:** Any excavations that will be left overnight should be covered or fitted with ramps to allow trapped mammals a means of escape.

APPENDIX A: EXTENDED PHASE 1 HABITAT SURVEY (Middlemarch Environmental Ltd)

EXTENDED PHASE 1 HABITAT SURVEY
BOURNE ESTATE (SOUTH) REGENERATION
CAMDEN

A Report to CampbellReith Hill LLP

Middlemarch Environmental Ltd
Triumph House
Birmingham Road
Allesley
Coventry
CV5 9AZ

Tel: 01676 525880
Fax: 01676 521400

E-Mail: admin@middlemarch-environmental.com
Web Site: www.middlemarch-environmental.com

Report Number: RT-MME-111475A-01 Rev 2

May 2012

EXTENDED PHASE 1 HABITAT SURVEY
BOURNE ESTATE (SOUTH) REGENERATION
CAMDEN

CONTROLLED COPY

01 OF 02

01 CAMPBELLREITH HILL LLP
02 MIDDLEMARCH ENVIRONMENTAL LTD

This report was compiled by:
Lucy Philpott MSc MIEEM TechCert(ArborA) and Joe Hamer BSc

*The contents of this report are the responsibility of Middlemarch Environmental Ltd.
It should be noted that, whilst every effort is made to meet the client's brief,
no site investigation can ensure complete assessment
or prediction of the natural environment.*

Contract Number C111475

May 2012

EXECUTIVE SUMMARY

Middlemarch Environmental Ltd was commissioned by CampbellReith Hill LLP (hereafter referred to as CampbellReith) to carry out an initial ecological appraisal of the Bourne Estate South in Camden, London. To fulfil this brief an ecological desk study and Extended Phase I Habitat Survey were undertaken.

The ecological desk study revealed no nature conservation sites with statutory protection and twelve sites with non-statutory protection within a 1 km radius of the study site. The nearest nature conservation site is St John's Gardens which is located 370 m east from the survey site. It is not anticipated that there will be any impact to this or the remaining conservation sites as a result of the proposed development due to the distances involved and the built up nature of the intervening habitats. The desk study also provided records for a number of protected and notable species including: bats, birds, amphibians and invertebrates.

The Extended Phase I Habitat Survey was undertaken on 29th April 2012 by Lucy Philpott, Principal Ecological Consultant. At the time of the survey the site was dominated by hardstanding with a number of high rise brick buildings and small areas of associated amenity grassland and shrub planting. Additional habitats recorded included: dense scrub, scattered trees and species-poor defunct hedgerow.

In order to ensure compliance with wildlife legislation and relevant planning policy, the following recommendations are made:

- **Bats:** If the community building has not been demolished by May 2013 then it should be subject to a detailed bat inspection to ensure no bats have occupied the building since the April 2012 survey. Initial bat surveys can be completed at any time of year.
- **Nesting Birds (including peregrine falcon):** To ensure compliance with the Wildlife and Countryside Act 1981 (as amended), vegetation clearance and building demolition should be undertaken outside the nesting bird season. The nesting bird season is weather dependent but generally extends between March and September inclusive. If this is not possible then any vegetation that is to be removed or disturbed or buildings to be demolished should be checked by an experienced ecologist for nesting birds immediately prior to works commencing. If birds are found to be nesting any works which may affect them would have to be delayed until the young have fledged and the nest has been abandoned naturally.
- **Foraging Mammals:** Any excavations that will be left overnight should be covered or fitted with ramps to allow trapped mammals a means of escape.

Recommendations regarding habitat enhancement and the protection of trees have also been made and can be viewed in Section 6.2.

CONTENTS

1. INTRODUCTION.....	5
1.1 PROJECT BACKGROUND.....	5
1.2 SITE DESCRIPTION.....	5
2. METHODOLOGIES	6
2.1 DESK STUDY	6
2.2 EXTENDED PHASE 1 HABITAT SURVEY.....	6
3. DESK STUDY RESULTS	7
3.1 INTRODUCTION	7
3.2 NATURE CONSERVATION SITES	7
3.3 PROTECTED SPECIES	8
3.4 INVASIVE SPECIES.....	10
4. EXTENDED PHASE 1 HABITAT SURVEY	11
4.1 INTRODUCTION	11
4.2 SURVEY CONSTRAINTS	11
4.3 HABITATS.....	11
4.4 FAUNA	13
4.5 INVASIVE PLANT SPECIES.....	13
5. DISCUSSIONS AND CONCLUSIONS.....	14
5.1 SUMMARY OF PROPOSALS	14
5.2 NATURE CONSERVATION SITES	14
5.3 HABITATS.....	14
5.4 PROTECTED/NOTABLE SPECIES	15
5.5 INVASIVE PLANT SPECIES.....	17
6. RECOMMENDATIONS	18
6.1 NATURE CONSERVATION SITES	18
6.2 HABITATS.....	18
6.3 PROTECTED / NOTABLE SPECIES.....	18
6.4 INVASIVE PLANT SPECIES.....	19
REFERENCES AND BIBLIOGRAPHY.....	20
APPENDICES	21
APPENDIX 1	22
APPENDIX 2	25
APPENDIX 3	27

1. INTRODUCTION

1.1 PROJECT BACKGROUND

In April 2012 CampbellReith commissioned Middlemarch Environmental Ltd to undertake an initial ecological appraisal of the site of a proposed development at Bourne Estate in Camden, London. It is understood that the proposals for the site include the demolition of the community centre and associated buildings in the centre of the site and Mawson House in the south east of the site, and construction of new residential dwellings in their place.

Middlemarch Environmental Ltd has also carried out an Arboricultural Survey at this site. The findings of this survey is detailed in Middlemarch Environmental Ltd Report RT-MME-111475A-02.

To fulfil the above brief to assess the existing ecological interest of the site, a desk study and an Extended Phase 1 Habitat Survey were undertaken on 29th April 2012.

1.2 SITE DESCRIPTION

The study site is situated in a residential area of Camden, London at central National Grid Reference TQ 311 818. The survey area occupies an area of approximately 0.9 ha and is predominantly flat in topography. At the time of the survey the site was dominated by hardstanding with a number of buildings and areas of amenity grassland, shrub beds and scattered trees. Additional habitats recorded included dense scrub and species-poor defunct hedgerow.

St Albans Church of England Primary School bordered the site to the south east. Portpool Lane formed the northern boundary and Baldwin Gardens bordered the site to the south. The eastern and western boundaries were formed by high-rise residential buildings.

2. METHODOLOGIES

2.1 DESK STUDY

A desk study was undertaken to determine the presence of any designated nature conservation sites and protected species that have been recorded within a 1 km radius of the site. This involved contacting appropriate statutory and non-statutory organisations which hold ecological data relating to the survey area. Middlemarch Environmental Ltd then assimilated and reviewed the desk study data provided by these organisations.

The consultees for the Desk Study were:

- Natural England - *MAGIC* website for statutory conservation sites; and,
- Greenspace Information for Greater London (GiGL)

The data collected from these consultees is discussed in Section 3. Some raw data are provided in Appendix 1. The full data from GiGL are provided in GiGL report 12/120.

2.2 EXTENDED PHASE 1 HABITAT SURVEY

An Extended Phase 1 Habitat Survey was conducted following the methodology of the Joint Nature Conservation Committee (JNCC, 1993) as modified by the Institute of Environmental Assessment (IEA, 1995). Phase 1 Habitat Survey is a standard technique for classifying and mapping British habitats. The aim is to provide a record of habitats that are present on site. During the survey, the presence, or potential presence, of protected species was noted. Data recorded during the field survey is discussed in Section 4.

Whilst every effort is made to notify the client of any plant species listed on Schedule 9 of the Wildlife and Countryside Act (1981, as amended) present on site, it should be noted that this is not a specific survey for these species.

3. DESK STUDY RESULTS

3.1 INTRODUCTION

All relevant ecological data provided by the consultees was reviewed and the results from these investigations are summarised below in Sections 3.2 and 3.3. Full data can be found in Appendix 1 and in GiGL report 12/120.

3.2 NATURE CONSERVATION SITES

Reference to the Multi Agency Geographical Information for the Countryside (MAGIC) website and the local biodiversity information indicates that no nature conservation sites with statutory protection and twelve nature conservation sites with non-statutory protection occur within a 1 km radius of the survey area. These sites are summarised in Table 3.1 and the locations are shown within Appendix 1.

Site Name	Designation	Proximity to Survey Area	Description
St John's Gardens (IsL13)	SLINC	370 m east	The site contains mature trees, mainly London plane <i>Platanus x hispanica</i> with some birch <i>Betula pendula</i> .
Lincoln's Inn Fields (CaL12)	SLINC	450 m south west	The site contains many mature specimens of London plane. Other trees include ash <i>Fraxinus excelsior</i> and holm oak <i>Quercus ilex</i> . Extensive shrubberies line the perimeter including lilac <i>Syringa vulgaris</i> and barberry <i>Berberis</i> sp.
Coram's Fields (CaL14)	SLINC	560 m north west	The site contains numerous mature London plane trees and a beech <i>Fagus sylvatica</i> hedgerow. At the western edge of the site, white mulberry <i>Morus alba</i> and black mulberry <i>M. nigra</i> have been planted.
St Andrew's Gardens (CaL08)	SLINC	580 m north west	Mature common lime <i>Tilia x europaea</i> and beech trees line the path and boundaries within this site. Extensive shrubberies include many insect-attracting species such as buddleia <i>Buddleja davidii</i> and hazel <i>Corylus avellana</i> .
Wilmington Square (IsL20)	SLINC	590 m north	This square has been planted with a wide range of native trees and shrubs.
Calthorpe Community Garden (CaL05)	SLINC	750 m north west	The site contains scattered trees, including young beech and ash. The rockery gardens are planted with a number of insect attracting species, such as rosemary <i>Rosmarinus officinalis</i> and foxglove <i>Digitalis purpurea</i> .
Spa Green Garden (IsL10)	SLINC	780 m north east	This public garden is made up of shrub borders which contain hazel, elm <i>Ulmus</i> sp. and elder <i>Sambucus nigra</i> . The garden is shaded by plane and horse-chestnut <i>Aesculus hippocastanum</i> .
St George's Gardens (CaL09)	SLINC	800 m north west	The site contains many mature trees, particularly London plane and weeping ash <i>Fraxinus excelsior</i> var. <i>pendula</i> . There are areas of shrubbery which contain insect-attracting plants such as rose <i>Rosa</i> sp. and lavender <i>Lavendula</i> sp.
Key: SLINC: Site of Local Importance for Nature Conservation SINC: Site of Importance for Nature Conservation			

Table 3.1: Summary of Nature Conservation Sites (Continues)

Site Name	Designation	Proximity to Survey Area	Description
Lloyd Square (IsL18)	SLINC	810 m North	The square features many mature trees including lime <i>Tilia</i> sp., London plane and horse-chestnut, as well as a herb garden.
Russell Square (CaL11)	SLINC	850 m North West	This square contains many mature trees, mostly London plane. Other trees include horse-chestnut and holly <i>Ilex aquilifolium</i> .
Temple Gardens (CiBII01)	SBINC Grade 2	860 m South	The gardens comprise open lawns with a variety of mature trees, small areas of shrubbery and some wall-climbing shrubs, and attractive flower beds. Bird life includes great tit <i>Parus major</i> , blue tit <i>Cyanistes caeruleus</i> and blackbird <i>Turdus merula</i> .
Middle Temple Garden (WeBII09)	SBINC Grade 2	890 m South	The gardens comprise open lawns with a variety of mature trees, small areas of shrubbery and some wall-climbing shrubs, and attractive flower beds. Bird life includes great tit, blue tit and blackbird.
Key: SLINC: Site of Local Importance for Nature Conservation SINC: Site of Importance for Nature Conservation SBINC: Site of Borough Importance for Nature Conservation			

Table 3.1: Summary of Nature Conservation Sites (Continued)

3.3 PROTECTED SPECIES

Table 3.2 provides a summary of protected species records within a 1 km radius of the study area. It should be noted that the absence of records should not be taken as confirmation that a species is absent from the search area. Records of UK and local Biodiversity Action Plan (BAP) have also been included within this table.

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Study Area	UK BAP?	Local BAP?	NERC S.41 List?	Legislation / Conservation Status
Bats							
Common pipistrelle <i>Pipistrellus pipistrellus</i>	2	1993	702 m South West	-	✓	-	ECH 4, WCA 5, WCA 6
Unidentified bat species <i>Vespertilionidae</i> sp.	1	2008	825 North West	#	✓	#	ECH 4, WCA 5, WCA 6
Pipistrelle bat <i>Pipistrellus</i> sp.	1	1993	563 south West	#	✓	#	ECH 4, WCA 5, WCA 6
Birds							
Black redstart <i>Phoenicurus ochuros</i>	15	2005	347 north	-	✓	-	WCA1i
Peregrine falcon <i>Falco peregrinus</i>	1	2005	Within 1 km radius	-	✓	-	WCA1i
Invertebrates							
Stag beetle <i>Lucanus cervus</i>	1	2009	347 m North	✓	✓	✓	ECH 2, WCA 5 S9(5)
Plants							
Cornflower <i>Centaurea cyanus</i>	1	2010	687 m North East	✓	-	✓	-
Key: #: Species dependent ECH 2: Annex II of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora. Animal and plant species of community interest whose conservation requires the designation of Special Areas of Conservation. ECH 4: Annex IV of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora. Animal and plant species of community interest in need of strict protection. WCA 1i: Schedule 1 Part 1 of Wildlife and Countryside Act 1981 (as amended). Birds protected by special penalties at all times. WCA 5: Schedule 5 of Wildlife and Countryside Act 1981 (as amended). Protected animals (other than birds). WCA 5 S9(5): Schedule 5 Section 9(5) of Wildlife and Countryside Act 1981 (as amended). Protected animals (other than birds). Protection limited to selling, offering for sale, processing or transporting for purpose of sale, or advertising for sale, any live or dead animal, or any part of, or anything derived from, such animal. WCA 6: Schedule 6 of Wildlife and Countryside Act 1981 (as amended). Animals which may not be killed or taken by certain methods. UK BAP: United Kingdom Biodiversity Action Plan. Local BAP: London Biodiversity Action Plan NERC S.41: Natural Environment and Rural Communities Act 2006, Section 41: Habitats Note. This table does not include reference to the Berne Convention (Convention on the Conservation of European Wildlife and Natural Habitats), the Bonn Convention on the Conservation of Migratory Species of Wild Animals or the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).							

Table 3.2: Summary of Protected/Notable Species Records Within 1 km Radius of Study Site

In addition to those detailed within Table 3.2, the desk study identified records of a number of bird species. These included records of the following species listed on the RSPB Red List (species of high conservation concern): herring gull *Larus argentatus*, fieldfare *Turdus pilaris*, song thrush *Turdus philomelos*, redwing *Turdus iliacus*, common starling *Sturnus vulgaris*, and house sparrow *Passer domesticus*. Records of hedge

accentor *Prunella modularis*, a species listed on the RSPB Amber List (species of moderate conservation concern), were also identified. A number of these bird species are also included on the UK and local BAPs.

3.4 INVASIVE SPECIES

Table 3.3 provides a summary of invasive species records within a 1 km radius of the study area. It should be noted that the absence of records should not be taken as confirmation that a species is absent from the search area.

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Study Area	Legislation
Butterfly-bush <i>Buddleja davidii</i>	7	2003	193 m West	LISI 3
Green alkanet <i>Pentaglottis sempervirens</i>	3	2010	604 m South	LISI 6
Small balsam <i>Impatiens parviflora</i>	1	2005	685 m North West	LISI 5
Montbretia <i>Crocasmia pottsii</i> x <i>aurea</i> = <i>C. x crocosmiiflora</i>	1	2010	849 m East	LISI 2 WCA 9
Key: WCA 9: Schedule 9 of the Wildlife and Countryside Act 1981 Species that are illegal to plant or otherwise cause to spread or grow in the wild. LISI 2: Species of high impact or concern present at specific sites that require attention (control, management, eradication etc). Such species are priority species for action in London and LISI encourages this wherever possible. LISI 3: Species of high impact or concern which are widespread in London and require concerted, coordinated and extensive action to control/eradicate. These species are species currently causing large scale impacts across London and LISI supports or catchment wide partnership working to ensure this. LISI 5: Species for which insufficient data or evidence was available from those present to be able to prioritise. LISI 6: Species that are not currently considered to pose a threat or have the potential to cause problems in London.				

Table 3.3: Summary of Invasive Species Records Within 1 km Radius of Study Site

4. EXTENDED PHASE 1 HABITAT SURVEY

4.1 INTRODUCTION

The results of the Extended Phase 1 Habitat Survey are presented in Section 4.2. An annotated Extended Phase 1 Habitat Survey Drawing (Middlemarch Environmental Ltd Drawing C111475A-01-01) is attached in Appendix 2. This drawing illustrates the location and extent of all habitat types recorded on site. Any notable features or features too small to map are detailed using target notes.

The survey was carried out on 29th April 2012 by Lucy Philpott, Principal Ecological Consultant. Table 4.1 details the weather conditions at the time of the survey.

Parameter	Condition
Temperature (°C)	7
Cloud (%)	100%
Wind	F 3-4
Precipitation	Rain

Table 4.1: Weather Conditions During Survey Period

4.2 SURVEY CONSTRAINTS

No constraints were experienced during the survey.

4.3 HABITATS

The following habitat types were recorded on site during the field survey:

- Amenity Grassland;
- Building;
- Dense Scrub;
- Fence and Wall;
- Hardstanding;
- Introduced Shrub;
- Scattered Broadleaved Trees; and,
- Species-Poor Defunct Hedgerow.

These habitats are described below. They are ordered alphabetically, not in order of ecological importance.

Amenity Grassland

Areas of closely mown amenity grassland formed gardens and public amenity spaces across the survey area. The grassland had a species-poor sward including perennial rye-grass *Lolium perenne*, clover *Trifolium* sp., dandelion *Taraxacum officinale* agg., daisy *Bellis perennis*, creeping cinquefoil *Potentilla reptans*, meadow-grass *Poa* sp. and ribwort plantain *Plantago lanceolata*.

Building

Two high-rise brick buildings were present within the study area. Gooch House was located in the north west of the study site and Mawson House in the south eastern corner. The high-rise buildings were of similar structure with flat roofs and balconies present. The brickwork appeared to be in good condition and the windows were well-sealed to the surrounding structure.

A small community centre and associated buildings was situated in the centre of the study site. These buildings were single storey, two had pitched roofs (one corrugated metal, one slate) and one was of flat roofed construction. The buildings were generally in a good state of repair with the exception of gaps which were present in the soffit box that surrounded the community centre building. The gaps were visually inspected and found to be cobweb covered.

Dense Scrub

A small area of dense scrub was situated in the south-western corner of the site. The area of scrub consisted of holly *Ilex aquifolium* and wych elm *Ulmus glabra* with ash *Fraxinus excelsior* saplings.

Fence and Wall

The majority of the fencing on site consisted of 1 m high metal ornamental fencing. Metal post and mesh fencing was located on the boundary with a school to the south of the site. The fences on site were generally in a good state of repair and supported no notable vegetation. A number of walls were present within the site, these ranged in height and many formed retaining features. The walls were in good condition with no missing mortar or cracks recorded.

Hardstanding

Portpool Lane was located along the northern boundary of the site. Tarmac footpaths and play areas (Target Note 1) were present throughout the site. A large Multi-use Games Area was also present within the centre of the study site (Target Note 2). The areas of hardstanding were in good condition and did not support any notable vegetation.

Introduced Shrub

Dense introduced shrub beds were located across the site but predominantly in the west. Species recorded included spotted-laurel *Aucuba japonica*, ivy *Hedera helix*, Oregon-grape *Mahonia aquifolium*, hedge bindweed *Calystegia sepium*, barberry *Berberis* sp., rose *Rosa* sp. and Californian lilac *Ceanothus* sp.

Scattered Broadleaved Trees

A number of scattered trees were found ranging in age from saplings to mature and growing to a height of 2-14 m. Species included ash *Fraxinus* sp., London plane *Platanus x hispanica*, bird cherry *Prunus padus*, silver birch *Betula pendula* and honey locust *Gleditsia triacanthos*. The trees were generally in good condition with no rot holes, cracks or crevices.

Species-poor Defunct Hedgerow

A short section of hedgerow was located in the south eastern corner of the site. The hedgerow comprised Lawson cypress *Chamaecyparis lawsoniana*, growing to a height of 5 m. There was no associated ground flora.

4.4 FAUNA

During the survey field signs of faunal species were noted. The time of year at which the survey is undertaken will affect species or field signs directly recorded during the survey.

Evidence of the following faunal species was observed on site:

Birds

A range of common bird species, including feral pigeon *Columba livia*, blackbird *Turdus merula* and wren *Troglodytes troglodytes* were recorded on site during the field survey.

4.5 INVASIVE PLANT SPECIES

No invasive plant species were recorded during survey.

5. DISCUSSIONS AND CONCLUSIONS

5.1 SUMMARY OF PROPOSALS

It is understood that the proposals for the site include the demolition of the community centre and associated buildings in the centre of the site and Mawson House in the south east of the site, and construction of new residential dwellings. Information provided by the client indicates that areas in the north and west of the site are not be affected by the proposed development.

5.2 NATURE CONSERVATION SITES

The desk study identified no sites subject to statutory protection and twelve sites subject to non-statutory protection within 1 km radius of the site. The nearest of these is St John's Gardens which is located 370 m east of the site. It is not anticipated that there will be any impact to this or the remaining conservation sites as a result of the proposed development. This is due to the distances involved and the built up nature of the intervening habitats.

5.3 HABITATS

The ecological importance of the habitats present on site is assessed against their presence on the UK and Local BAPs and on Section 41 of the Natural Environment and Rural Communities Act, 2006 (NERC Act). It also takes into account the intrinsic value of the habitat e.g. mature trees which cannot easily be replaced. Those habitats which meet any of these criteria and are considered likely to be impacted by the proposals are highlighted as notable considerations. This is summarised in Table 5.1 and further discussed in the text below. Table 5.1 assesses the value of the habitat in its own right and specifically excludes the value associated with its potential to support protected or notable species. A discussion of the habitat value in relation to protected or notable species can be found in Section 5.4.

Habitat Type	UK BAP?	Local BAP?	NERC Act?	Will habitat be impacted?	Is Habitat a Notable Consideration?
Amenity Grassland	No	Yes*	No	Yes	Yes
Buildings	No	Yes	No	Yes	No
Dense Scrub	No	Yes*	No	Yes	Yes
Fence and Wall	No	No	No	Yes	No
Hardstanding	No	No	No	Yes	No
Introduced Shrub	No	Yes*	No	Yes	Yes
Scattered Broadleaved Trees	No	Yes*	No	Yes	Yes
Species-Poor Defunct Hedgerow	No	Yes*	No	Yes	Yes
Key: UK BAP: United Kingdom Biodiversity Action Plan Local BAP: London Biodiversity Action Plan *: Included under 'Parks and Urban Green Spaces' habitat action plan					

Table 5.1: Summary of Ecological Importance of Habitats on Site

Several of the trees recorded within on the site were mature. The mature trees are of considerable value and cannot be replaced if lost. Due to their maturity, these trees are of notable consideration in relation to the proposed redevelopment. The indicative proposals provided show that a number of trees may be lost as part of the development. Suitable mitigation planting will need to be reinstated to help reduce the impact of the loss of mature trees; recommendations are made in Section 6.2.

The natural habitats (grassland, trees, hedgerows, shrubs and scrub) are all included within the 'Parks and Urban Green Spaces' habitat action plan. The development proposals will result in the loss of small sections of urban green space and consequently appropriate enhancement measures to existing green spaces and creation of new green areas will be required to adequately mitigate the impact of the loss of these areas; recommendations are made in Section 6.2.

Built structures are included as important features on the local BAP due to their importance for protected species. However, the buildings that are to be demolished are to be replaced by new residential dwellings. Therefore built structures are not a notable consideration as a habitat type in relation to the proposed development.

The remaining habitats are abundant in the local area and support a limited number of common plant species. Therefore these habitats are not notable considerations in relation to the proposed development.

5.4 PROTECTED/NOTABLE SPECIES

Table 5.2 and the discussion below consider any species identified within the desk study or where potentially suitable habitat is present.

Species/ Species Group	Key habitats for these species	Will species be impacted, if present?	Is Species a Notable Consideration?
Bats	Roosting: Buildings, scattered trees Foraging: Scattered trees, hedgerow, dense scrub	Yes	Yes
Birds - general	Introduced shrub, hedgerow, dense scrub, scattered trees	Yes	Yes
Black redstart	None on site.	Yes	No
Peregrine falcon	High-rise buildings	Yes	Yes
Stag beetle	None currently on site	No	No
Cornflower	None on site	No	No

Table 5.2: Summary of Ecological Importance of Species on Site

Mammals

Bats

The desk study identified records of three bat species within the search area. The bat records were in excess of 500 m from the study site. The two high-rise buildings offer negligible potential for roosting bats. The community centre building contained a gap in a soffit box which although covered with cobwebs at the time of the survey offers a potential roosting location for bats. The presence of cobwebs indicates that no

bats or birds have used this access point recently. Due to the potential for roosting bats to be present, bats are a notable consideration for the development and a recommendation is made within Section 6.3.

The existing trees, shrubs and scrub provide foraging habitat for bats. Any loss/change made to the existing garden habitats will not adversely affect foraging bats due to the residential surroundings with ample areas of alternative foraging habitat. A recommendation in relation to planting within the new development to enhance the area for foraging bats is made within Section 6.3.

Terrestrial foraging mammals

The survey area may be utilised by foraging mammals such as fox *Vulpes vulpes* and hedgehog *Erinaceus europaeus*. The development will have no long-term impact on the population of these animals given the current site usage and nature of the proposed development works. Precautionary recommendations are made within Section 6.3 to prevent any adverse impact upon any foraging mammals using the site.

Birds

The desk study provided records of black redstart and peregrine falcon which are listed on Schedule 1 of the Wildlife and Countryside Act and on the local BAP. The study site offers no suitable habitat for black redstart, a species which prefers industrial buildings in association with water and are primarily located along the Thames Corridor. Black redstart is therefore not a notable consideration for the development. The high-rise buildings within the study site offer potential nesting locations for peregrine falcon. Although no peregrines were identified during the survey, the weather was inclement and therefore this species may not have been recorded. As there is potential for nesting peregrines to be present precautionary recommendations are made within Sections 6.2 and 6.3.

The desk study and field survey also identified numerous bird species. A number of the habitats on site could support these nesting birds as well as a range of other common bird species e.g. introduced shrub beds, scattered trees and dense scrub. If the works are undertaken in the bird nesting season (March – September) there is the potential for impact upon nesting birds and as such recommendations are made within Section 6.3. Due to the presence of a large range of alternative nesting areas and vegetation within the local vicinity it is considered that the works should not adversely impact upon nesting birds in the long-term.

Invertebrates

The desk study identified records of stag beetle 347 m from the study site. The site currently offers no suitable habitat such as decaying wood. The fallen/laid down tree (Target Note 3) may provide future habitat for this species but is currently not showing signs of decay. This species is therefore not a notable consideration for the development.

Plants

The desk study identified a record of cornflower within the search area. This plant occurs predominantly in agricultural habitat none of which are present within the study site. April is not an optimal time to identify this species however it is not considered that cornflower will be present within the study site and will therefore not be impacted by any proposals.

A summary of legislation relevant to the ecology of the site is included in Appendix 3.

5.5 INVASIVE PLANT SPECIES

The desk study identified a number invasive plant species listed on Schedule 9 of the Wildlife and Countryside Act and/or species present on London Invasive Species Initiative list. However no invasive species were recorded during site survey.

6. RECOMMENDATIONS

6.1 NATURE CONSERVATION SITES

No recommendations are made in relation to nature conservation sites.

6.2 HABITATS

The following recommendations are made regarding the habitats present on site:

- **Habitat Loss:** In accordance with the provision of Chapter 11 of the National Planning Policy Framework (Conserving and Enhancing the Natural Environment) and Local Planning Policy, a biodiversity enhancement plan should be incorporated into the landscaping scheme of any proposed works to maximise the ecological value of the site. This will involve, for example:
 - Planting native flowers and seed/fruit bearing species which will be of value to wildlife including cornflower which is on the local BAP and located within 1 km of the site.
 - Planting plant species which attract night flying insects which will be of value to foraging bats. Species include evening primrose *Oenothera biennis*, goldenrod *Solidago virgaurea*, honeysuckle *Lonicera periclymenum* and fleabane *Pulicaria dysenterica*.
 - Inclusion of log piles to provide habitat for amphibians and invertebrates such as stag beetles.
 - Inclusion of hedgehog passes under any fence lines to allow connectivity between garden habitats.
 - The provision of a peregrine nest-box, or specially designed ledge or recess to provide a safe platform for a nest, as part of the design of new tall buildings.
- **Trees:** Any trees and/or hedgerows on site, or overhanging the site, which are not to be removed as a part of any proposed works should be protected in accordance with British Standard 5837: 2012 "Trees in relation to design, demolition and construction - recommendations". Protection should be installed on site prior to the commencement of any works on site.

6.3 PROTECTED / NOTABLE SPECIES

The following recommendations are made regarding protected species that are potentially present on site:

- **Bats:** If the community building has not been demolished by May 2013 then it should be subject to a detailed bat inspection to ensure no bats have occupied the building since the April 2012 survey. Initial bat surveys can be completed at any time of year. Should these initial surveys recommend that further activity surveys are required, these further surveys can be undertaken during suitable weather conditions between May and September (inclusive). Ideal activity survey times are in suitable weather conditions between May and August, however surveys in September may be possible but consultation with Natural England / Local Planning Authority is recommended.

- **Nesting Birds (including peregrine falcon):** To ensure compliance with the Wildlife and Countryside Act 1981 (as amended), vegetation clearance and building demolition should be undertaken outside the nesting bird season. The nesting bird season is weather dependent but generally extends between March and September inclusive. If this is not possible then any vegetation that is to be removed or disturbed or buildings to be demolished should be checked by an experienced ecologist for nesting birds immediately prior to works commencing. If birds are found to be nesting any works which may affect them would have to be delayed until the young have fledged and the nest has been abandoned naturally.
- **Foraging Mammals:** Any excavations that will be left overnight should be covered or fitted with ramps to allow trapped mammals a means of escape.

6.4 INVASIVE PLANT SPECIES

There are no recommendations relating to invasive species.

REFERENCES AND BIBLIOGRAPHY

British Standards Institution. (2012). *British Standard 5837:2012, Trees in relation to design, demolition and construction – recommendations*. British Standards Institution, London.

Department for Communities and Local Government (2012). National Planning Policy Framework. Available: <http://www.communities.gov.uk/planningandbuilding/planningsystem/planningpolicy/planningpolicyframework/>

Eaton MA, Brown AF, Noble DG, Musgrove AJ, Hearn R, Aebischer NJ, Gibbons DW, Evans A and Gregory RD (2009) 'Birds of Conservation Concern 3: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man'. *British Birds* 102 pp296–341.

IEA. (1995). *Guidelines for Baseline Ecological Assessment*, Institute of Environmental Assessment. E&FN Spon, An Imprint of Chapman and Hall. London.

JNCC, (1993). *Handbook for Phase 1 Habitat Survey: A technique for environmental audit (reprint)*. Joint Nature Conservation Committee, Peterborough.

London Biodiversity Partnership (no date). 'London Biodiversity Action Plan'. Available: <http://www.lbp.org.uk>

Middlemarch Environmental Ltd (2012). Arboricultural Survey: Bourne Estate, London. Report Number RT-MME-111475A-02.

UK Biodiversity Partnership. (no date). 'UK Biodiversity Action Plan'. Available: <http://www.ukbap.org.uk>

APPENDICES

APPENDIX 1: Desk Study Data

APPENDIX 2: Middlemarch Environmental Ltd Drawing C111475A-01-01
Extended Phase 1 Habitat Survey

APPENDIX 3: Overview of Relevant Legislation

APPENDIX 1

Desk Study Data

The full data are provided in GiGL report 12/120.

Site Check Report

Report generated on April 2 2012.

You clicked on the point:

Grid Ref: TQ311818

Full Grid Ref: 531100 , 181800

The following features have been found within 1,000 metres of your search point:

Counties, Metropolitan Districts and Unitary Authorities (GB)

Name	Geographic Level
GREATER LONDON	GREATER LONDON AUTHORITY

NUTS1 - Government Office Regions (GB)

Name	Reference	Hotlink
LONDON	UKI	http://www.ons.gov.uk/ons/guide-method/geography/beginner-s-guide/european/london/index.html

Ancient Woodland (England)

There are no features within your search area.

Local Nature Reserves (England)

There are no features within your search area.

National Nature Reserves (England)

There are no features within your search area.

Ramsar Sites (England)

There are no features within your search area.

Special Protection Areas (England)

There are no features within your search area.

Special Areas of Conservation (England)

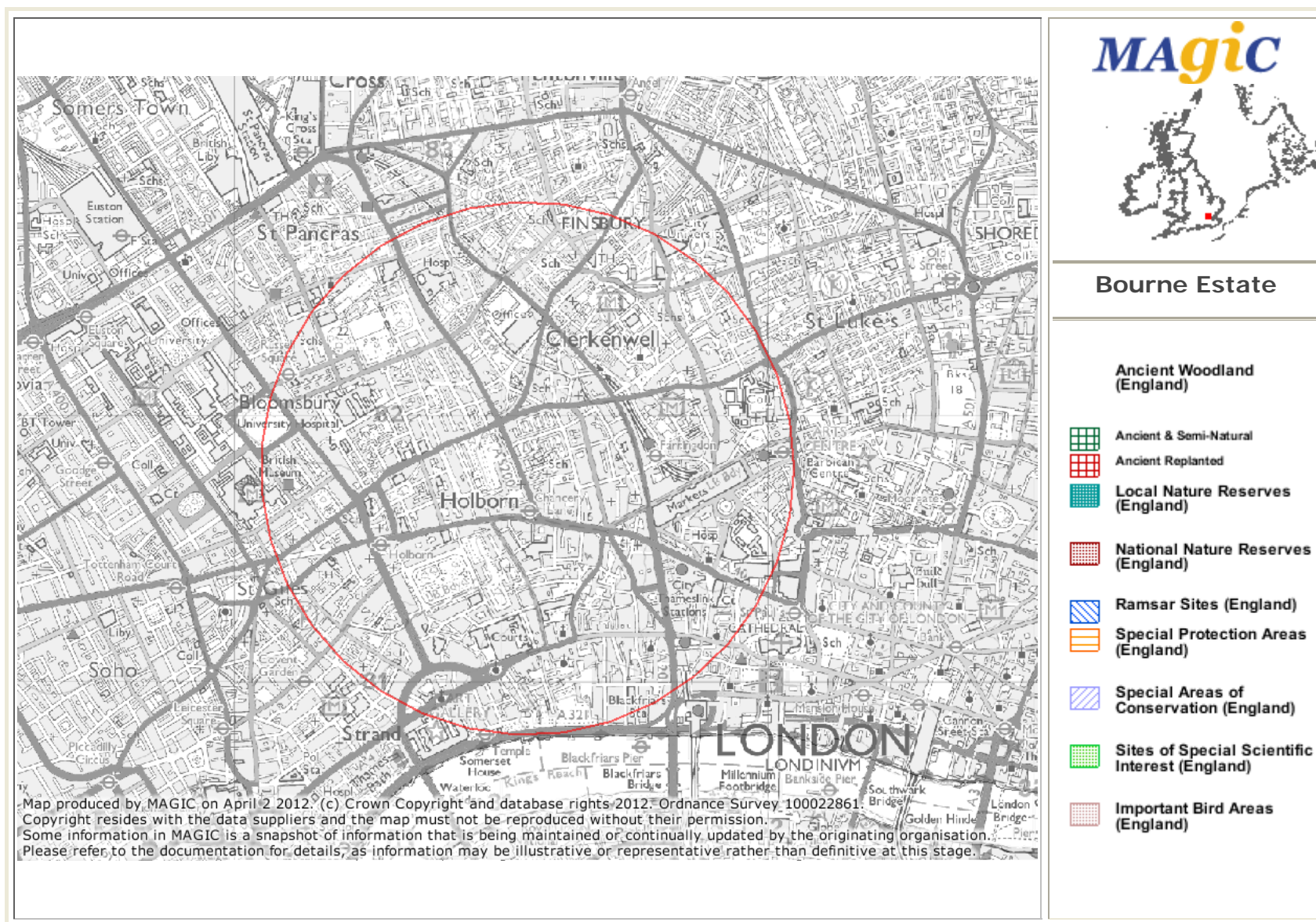
There are no features within your search area.

Sites of Special Scientific Interest (England)

There are no features within your search area.

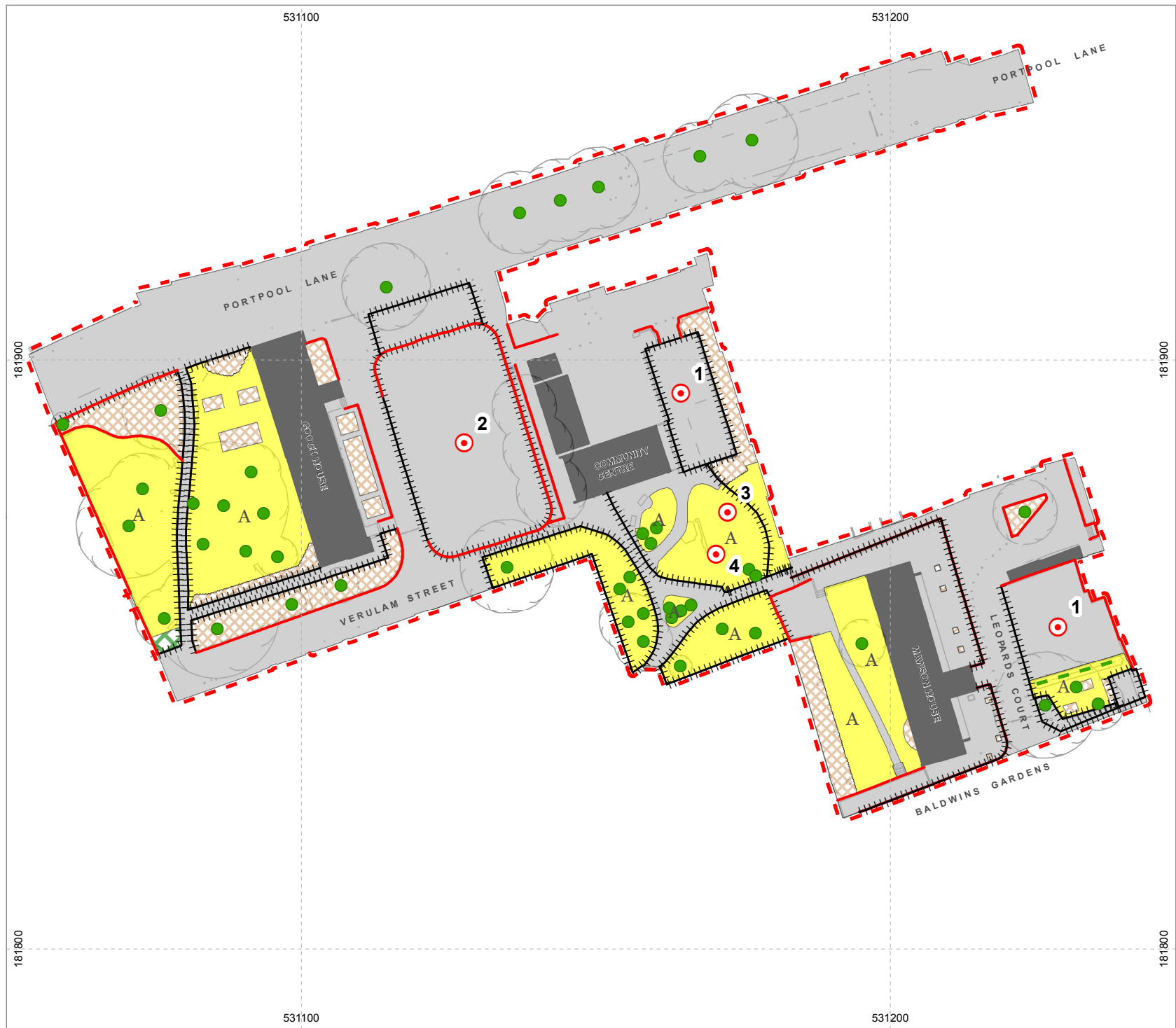
Important Bird Areas (England)

There are no features within your search area.



APPENDIX 2

Middlemarch Environmental Ltd Drawing C111475A-01-01
Extended Phase 1 Habitat Survey



C111475A-01-01

Legend

- Survey boundary
- Broad-leaved tree
- Fence
- Species-poor defunct hedgerow
- Wall
- A Amenity grassland
- Building
- X Dense scrub
- Hardstanding
- X Introduced shrub
- ⊙ Target notes
 - 1 - Play area
 - 2 - Multi-use Game Area
 - 3 - Fallen (placed) tree
 - 4 - Amenity grassland bank containing boulders



Client	Campbell Reith Hill	Project	Bourne Estate
Drawing	Extended Phase 1 Habitat Survey	Drawing Number	C111475A-01-01
Revision	00	Date	May 2012
Scale at A4	1:900	Drawn By	MO
Approved By	JH	Notes	-

MIDDLEMARCH ENVIRONMENTAL

Triumph House, Birmingham Road, Allesley, Coventry CV5 9AZ
 T: 01676 525880 F: 01676 521400
 E: admin@middlesmarch-environmental.com

This map is reproduced from the Ordnance Survey material with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.
 Licence Number: 100040519

APPENDIX 3

Overview of Relevant Legislation

GENERAL LEGISLATION AND POLICY OVERVIEW

This section provides an overview of the framework of legislation and policy which underpins nature conservation and is a material consideration in the planning process in England.

CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2010 (HABITATS REGULATIONS 2010)

The Habitats Regulations 2010 consolidate and update the Conservation (Natural Habitats, &c.) Regulations 1994 and all its various amendments. The Habitats Regulations 2010 are the principal means by which the EEC Council Directive 92/43 (The Habitats Directive) as amended is transposed into English and Welsh law.

The Habitats Regulations 2010 place duty upon the relevant authority of government to identify sites which are of importance to the habitats and species listed in Annexes I and II of the Habitats Directive. Those sites which meet the criteria are, in conjunction with the European Commission, designated as Sites of Community Importance, which are subsequently identified as Special Areas of Conservation (SAC) by the European Union member states. The regulations also place a duty upon the government to maintain a register of European protected sites designated as a result of EC Directive 79/409/EEC on the Conservation of Wild Birds (The Birds Directive). These sites are termed Special Protection Areas (SPA) and, in conjunction with SACs, form a network of sites known as Natura 2000. The Habitats Directive introduces for the first time for protected areas, the precautionary principle; that is that projects can only be permitted having ascertained no adverse effect on the integrity of the site. Projects may still be permitted if there are no alternatives, and there are imperative reasons of overriding public interest.

The Habitats Regulations 2010 also provide for the protection of individual species of fauna and flora of European conservation concern listed in Schedules 2 and 5 respectively. Schedule 2 includes species such as otter and great crested newt for which the UK population represents a significant proportion of the total European population. It is an offence to deliberately kill, injure, disturb or trade these species. Schedule 5 plant species are protected from unlawful destruction, uprooting or trade under the regulations.

THE WILDLIFE AND COUNTRYSIDE ACT (WCA) 1981 (AS AMENDED)

The WCA, as amended, consolidates and amends pre-existing national wildlife legislation in order to implement the Bern Convention and the Birds Directive. It complements the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended), offering protection to a wider range of species. The Act also provides for the designation and protection of national conservation sites of value for their floral, faunal or geological features, termed Sites of Special Scientific Interest (SSSIs).

Schedules of the act provide lists of protected species, both flora and fauna, and detail the possible offences that apply to these species. All relevant species specific legislation is detailed later in this Appendix.

THE COUNTRYSIDE AND RIGHTS OF WAY (CROW) ACT 2000

The CROW Act, introduced in England and Wales in 2000, amends and strengthens existing wildlife legislation detailed in the WCA. It places a duty on government departments and the National Assembly for Wales to have regard for biodiversity, and provides increased powers for the protection and maintenance of SSSIs.

The Act also contains lists of habitats and species (Section 74) for which conservation measures should be promoted, in accordance with the recommendations of the Convention on Biological Diversity (Rio Earth Summit) 1992.

THE NATURAL ENVIRONMENT AND RURAL COMMUNITIES (NERC) ACT 2006

Section 40 of the NERC Act places a duty upon all local authorities and public bodies in England and Wales to promote and enhance biodiversity in all of their functions. Sections 41 (England) and 42 (Wales) list habitats and species of principal importance to the conservation of biodiversity. These lists supersede Section 74 of the CROW Act 2000. These species and habitats are a material consideration in the planning process.

THE HEDGEROW REGULATIONS 1997

The Hedgerow Regulations make provision for the identification of important hedgerows which may not be removed without permission from the Local Planning Authority.

UK BIODIVERSITY ACTION PLAN

The United Kingdom Biodiversity Action Plan (UKBAP), first published in 1994 and updated in 2007, is a government initiative designed to implement the requirements of the Convention of Biological Diversity to conserve and enhance species and habitats. The UKBAP contains a list of priority habitats and species of conservation concern in the UK, and outlines biodiversity initiatives designed to enhance their conservation status. Lists and Broad and Local habitats are also included. The priority habitats and species correlate with those listed on Section 41 and 42 of the NERC Act.

The UKBAP requires that conservation of biodiversity is addressed at a County level through the production of Local BAPs. These are complementary to the UKBAP, however are targeted towards species of conservation concern characteristic of each area. In addition, a number of local authorities and large organisations have produced their own BAPs.

UKBAP and Local BAP targets with regard to species and habitats are a material consideration in the planning process.

SPECIES SPECIFIC LEGISLATION

This section contains a summary of legislation with relation to the species present or potentially present in the survey area. The reader should refer to the original legislation for definitive interpretation.

BATS

Bats and the places they use for shelter or protection (i.e. roosts) receive European protection under The Conservation of Habitats and Species Regulations 2010 (Habitats Regulations 2010). They receive further legal protection under the Wildlife and Countryside Act (WCA) 1981, as amended. This protection means that bats, and the places they use for shelter or protection, are capable of being a material consideration in the planning process.

Regulation 41 of the Habitats Regulations 2010, states that a person commits an offence if they:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats; or
- damage or destroy a bat roost (breeding site or resting place).

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.

It is an offence under the Habitats Regulations 2010 for any person to have in his possession or control, to transport, to sell or exchange or to offer for sale, any live or dead bats, part of a bat or anything derived from bats, which has been unlawfully taken from the wild.

Whilst broadly similar to the above legislation, the WCA 1981 (as amended) differs in the following ways:

- Section 9(1) of the WCA makes it an offence to *intentionally* (rather than deliberately) kill, injure or take any protected species.
- Section 9(4)(a) of the WCA makes it an offence to *intentionally or recklessly** damage or destroy, or *obstruct access to*, any structure or place which a protected species uses for shelter or protection.
- Section 9(4)(b) of the WCA makes it an offence to *intentionally or recklessly** disturb any protected species *while it is occupying a structure or place which it uses for shelter or protection*.

*Reckless offences were added by the Countryside and Rights of Way (CROW) Act 2000.

As bats re-use the same roosts (breeding site or resting place) after periods of vacancy, legal opinion is that roosts are protected whether or not bats are present.

The following bat species are listed on the UK BAP and Section 41 of the NERC Act 2006: Barbastelle Bat *Barbastella barbastellus*, Bechstein's Bat *Myotis bechsteini*, Noctule Bat *Nyctalus noctula*, Soprano Pipistrelle *Pipistrellus pygmaeus*, Brown Long-eared Bat *Plecotus auritus*, Greater Horseshoe Bat *Rhinolophus ferrumequinum* and Lesser Horseshoe Bat *Rhinolophus hipposideros*.

The reader should refer to the original legislation for the definitive interpretation.

NESTING AND NEST BUILDING BIRDS

Nesting and nest building birds are protected under the Wildlife and Countryside Act WCA 1981 (as amended). Some species (listed in Schedule 1 of the WCA) are protected by special penalties.

Subject to the provisions of the act, if any person intentionally:

- kills, injures or takes any wild bird;
- takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or
- takes or destroys an egg of any wild bird,

he shall be guilty of an offence.

'Reckless' offences with regard to the disturbance of nesting wild birds included in Schedule 1 of the Wildlife and Countryside Act were added by the Countryside and Rights of Way Act 2000.

The Natural Environment and Rural Communities (NERC) Act 2006 places a duty on Government Departments to have regard for the conservation of biodiversity and maintains lists of species and habitats which are of principal importance for the purposes of conserving biodiversity in England and Wales. These lists include a number of bird species.

MIDDLEMARCH ENVIRONMENTAL LTD

QUALITY ASSURANCE

TITLE: BOURNE ESTATE (SOUTH) REGENERATION
LONDON

EXTENDED PHASE 1 HABITAT SURVEY

A Report to CampbellReith

Contract Number: C111475

Report Number: RT-MME-111475A-01 Rev 2

Revision Number: 02

Description: Final

Date: May 2012

Checked by:

Anna Dudley
Senior Ecological Consultant

Approved by:

David Smith
Ecology and Landscapes Director



www.campbellreith.com

Friars Bridge Court
41-45 Blackfriars Road
London
SE1 8NZ

Telephone: +44(0)20 7340 1700
Facsimile: +44(0)20 7340 1777
Email: london@campbellreith.com

Structural + Civil + Environmental + Geotechnical + Traffic and
Transportation

Raven House
29 Linkfield Lane
Redhill
Surrey
RH1 1SS

Telephone: +44(0)1737 784 500
Facsimile: +44(0)1737 784 501
Email: surrey@campbellreith.com

The Lexicon
10-12 Mount Street
Manchester
M2 5NT

Telephone: +44(0)161 819 3060
Facsimile: +44(0)161 819 3090
Email: manchester@campbellreith.com

Wessex House
Pixash Lane
Keynsham
Bristol
BS31 1TP

Telephone: +44(0)117 916 1066
Facsimile: +44(0)117 916 1069
Email: bristol@campbellreith.com

Chantry House
High Street
Coleshill
Birmingham
B46 3BP

Telephone: +44(0)1675 467 484
Facsimile: +44(0)1675 467 502
Email: birmingham@campbellreith.com