

**SELWYN PRIMARY SCHOOL, 102 CAVENDISH ROAD,
HIGHAMS PARK, GREATER LONDON**

EXTENDED PHASE 1 HABITAT SURVEY

A Report to Mace Ltd

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

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February 2014

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HIGHAMS PARK, GREATER LONDON**

EXTENDED PHASE 1 HABITAT SURVEY

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01 OF 02

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This report was compiled by:
Amy Finnegan MSc, Peter Trickett
and Rachel Downie BSc (Hons)

*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 C116284

February 2014

EXECUTIVE SUMMARY

Middlemarch Environmental Ltd was commissioned by Mace Ltd to carry out an initial ecological appraisal at the site of a proposed development at Selwyn Primary School on Cavendish Road, in Highams Park, Greater London. To fulfil this brief an ecological desk study and Extended Phase 1 Habitat Survey were undertaken.

The ecological desk study revealed three nature conservation sites with statutory protection and four nature conservation sites with non-statutory protection within a 1 km radius of the survey area. 'Epping Forest' Special Area of Conservation and 'Epping Forest' Site of Special Scientific Interest are located 760 m from the development site. 'Ainslie Wood' Local Nature Reserve is located 510 m from the development site. The closest non-statutory site is 'Ching Brook in Central Walthamstow' Site of Borough Grade II Importance for Nature Conservation, located 40 m from the development site. The desk study also provided records of protected and notable species, including bats, amphibians, birds, stag beetle and grape-hyacinth.

The Extended Phase 1 Habitat Survey was undertaken on 24th February 2014 by Amy Finnegan, Ecological Consultant. At the time of the survey, the site was dominated by a main school building, with additional smaller buildings also present. Concrete and tarmac formed pathways and playgrounds around the buildings. Broadleaved trees, and planters containing introduced shrub, were situated within the areas of hardstanding. An area of soft landscaping in the south-western part of the site comprised short mown and unmanaged grassland, dense and scattered scrub, a small allotment and a small pond. The site was bound by broadleaved trees, wall, hedgerows and metal fencing.

The key ecological features on site in relation to the works proposed are the scattered trees, hedgerows, standing water and the habitats which form the area of soft landscaping in the south-western part of the site. The trees are of intrinsic value due to their age, and the hedgerows are Habitats of Principal Importance for Nature Conservation in England. The standing water is included on the Local BAP, and is also potentially a Habitat of Principal Importance for Nature Conservation in England. The area of soft landscaping is included on the Local BAP. In addition, the buildings provide potential habitat for roosting bats, and the standing water provides potential breeding habitat for amphibians. It is also considered that the site provides potential habitat for foraging/commuting bats, hedgehog, amphibians (terrestrial habitat), reptiles, foraging birds and stag beetle. It should be noted that Himalayan cotoneaster (an invasive species) was recorded on site.

In order to ensure compliance with wildlife legislation and relevant planning policy, the following recommendations are made (see Section 6 for further details):

- **Roosting Bats:** An initial bat survey should be undertaken on buildings which may be impacted by the proposed development works.
- **Foraging Bats:** Any lighting, either temporary or permanent, along the site boundaries should be kept to a minimum and directed away from the boundary features to maintain 'dark' areas and corridors.
- **Terrestrial Mammals (including Hedgehog):** Any excavations that need to be left overnight should be covered or fitted with mammal ramps. Any open pipework with an outside diameter of greater than 150mm must be blanked off at the end of each work day.
- **Hedgehog and Common Toad:** Vegetation clearance/removal should be undertaken in a sensitive manner to avoid harming hedgehogs and common toads.
- **Amphibians and Reptiles:** If the area of soft landscaping in the south-western part of the site is to be impacted by the proposed development, then it is recommended that a method statement is produced. This should include habitat manipulation, under the supervision of an experienced ecologist, prior to works commencing. This should be completed when amphibians/reptiles are active.
- **Nesting Birds:** Building demolition and vegetation clearance should be undertaken outside the nesting bird season. If this is not possible then any building or vegetation that is to be removed or disturbed should be checked by an experienced ecologist for nesting birds immediately prior to works commencing.
- **Stag Beetle:** Any log/brush piles should be left in situ. However, if the proposed works are to impact the area of soft landscaping in the south-western part of the site, then the log/brush piles should be relocated to a suitable habitat by an experienced ecologist.
- **Himalayan cotoneaster:** The works must not cause Himalayan cotoneaster to spread in the wild.

Recommendations regarding habitat enhancement and the protection of habitats have also been made in Section 6.2.

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1. INTRODUCTION

1.1 PROJECT BACKGROUND

In February 2014 Mace Ltd commissioned Middlemarch Environmental Ltd to undertake an initial ecological appraisal of the site of a proposed development at Selwyn Primary School on Cavendish Road, in Highams Park, Greater London. It is understood that the proposed development involves the demolition of buildings in the north-western part of the site, and construction of one or two new buildings.

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 24th February 2014.

1.2 SITE DESCRIPTION

The development site is located at Selwyn Primary School on Cavendish Road, in Highams Park, Greater London, at National Grid Reference TQ 381 915. The site is irregular in shape, measures approximately 1.1 ha in size and is situated in a predominantly residential area. At the time of the survey, the site was dominated by a main school building, with additional smaller buildings also present. Concrete and tarmac formed pathways and playgrounds around the buildings. Young to semi-mature broadleaved trees, and planters containing introduced shrub, were situated within the areas of hardstanding. An area of soft landscaping in the south-western part of the site comprised short mown and unmanaged grassland, dense and scattered scrub, a small allotment and a small pond. The site was bound by broadleaved trees, wall, hedgerows and metal fencing.

The wider landscape is dominated by residential development, with schools, warehouses and sports facilities/recreation grounds also present. However, Ainslie Wood (Site of Borough Grade I Importance for Nature Conservation) and Larks Wood (Site of Borough Grade I Importance for Nature Conservation) are located to the north of the site, with Highams Park to the north-east, a railway line to the east, Walthamstow Forest and Epping Forest (Special Area of Conservation, Site of Special Scientific Interest, and Site of Metropolitan Importance for Nature Conservation) and Walthamstow Forest to the south-east, and the Ching Brook (Site of Borough Grade II Importance for Nature Conservation) to the south.

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 CIC (GiGL).

The data collected from these consultees is discussed in Section 3. Selected data are provided in Appendix 1. Data from GiGL can be provided upon request.

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, 2010) and 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. Selected data is provided in Appendix 1.

3.2 NATURE CONSERVATION SITES

Reference to the Multi Agency Geographical Information for the Countryside (MAGIC) website and the local biodiversity information indicates that three nature conservation sites with statutory protection and four 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.

Site Name	Designation	Proximity to Survey Area	Description
European Statutory Sites			
Epping Forest	SAC	760 m south-west	Epping Forest is a large ancient wood-pasture with habitats of high nature conservation value. Records of stag beetle <i>Lucanus cervus</i> are widespread and frequent. This area has been designated as a Species Area of Conservation (SAC) because it contains habitat types and/or species which are rare or threatened within a European context.
UK Statutory Sites			
Ainslie Wood	LNR	510 m north	No further information provided.
Epping Forest	SSSI	760 m south-west	Epping Forest is one of only a few remaining large-scale examples of ancient wood-pasture in lowland Britain and has retained habitat of high nature conservation value. The range and number of wetland habitats in the Forest support an outstanding assemblage of amphibians. Significant number of smooth newt <i>Triturus vulgaris</i> , great crested newt <i>Triturus cristatus</i> , palmate newt <i>Triturus helveticus</i> , common toad <i>Bufo Bufo</i> and common frog <i>Rana temporaria</i> . The forest also supports four reptiles; adder <i>Vipera berus</i> , grass snake <i>Natrix natrix</i> , slow-worm <i>Anguis fragilis</i> and common lizard <i>Lacerta vivipara</i> .
Non-statutory Sites			
Ching Brook in Central Walthamstow	SBINC (2)	40 m south	A tree-lined stream, flowing through allotments and open space between housing. Habitats of note comprise allotments, running water, scattered trees, scrub, secondary woodland and semi-improved neutral grassland.
Ainslie Wood	SBINC (1)	510 m north	A small ancient woodland, with a good range of wild flowers, managed as a nature reserve. Habitats of note comprise ancient woodland, scrub and semi-improved neutral grassland.

Table 3.1: Summary of Nature Conservation Sites (Continues)

Site Name	Designation	Proximity to Survey Area	Description
Larks Wood	SBINC (1)	680 m north	An ancient woodland, which was separated from Epping Forest over 350 years ago. A number of mostly common birds occur, such as great spotted woodpecker <i>Dendrocopos major</i> , great tit <i>Parus major</i> , blackbird <i>Turdus merula</i> , blue tit <i>Cyanistes caeruleus</i> , robin <i>Erithacus rubecula</i> and chiffchaff <i>Fringilla coelebs</i> . Habitats of note comprise amenity grassland, ancient woodland, hedgerow, scrub and semi-improved neutral grassland.
Epping Forest North	SMINC	760 m south-east	The extensive forest, along with areas of grassland and wetland, is one of London's three Special Areas of Conservation (SAC). The site is important for its reptiles and amphibian populations. Part of this site is a Site of Special Scientific Interest (SSSI), as well as a Special Area of Conservation (SAC) for its strong population of the declining stag beetle. Habitats of note comprise acid grassland, ancient woodland, pond/lake and scrub.
Key: SAC: Special Area of Conservation SSSI: Site of Special Scientific Interest LNR: Local Nature Reserve SMINC: Site of Metropolitan Importance for Nature Conservation SBINC (1): Site of Borough Grade I Importance for Nature Conservation SBINC (2): Site of Borough Grade II Importance for Nature Conservation			

Table 3.1 (Continued): Summary of Nature Conservation Sites

3.3 PROTECTED SPECIES

Table 3.2 provides a summary of protected and notable 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	Species of Principal Importance?	Local BAP?	Legislation / Conservation Status
Mammals – Bats						
Pipistrelle bat species <i>Pipistrellus</i> sp.	7	2008	159 m south	#	✓	ECH 4, WCA 5, WCA 6
Unidentified bat species <i>Vespertilionidae</i> sp.	7	2004	345 m east	#	✓	#, ECH 4, WCA 5, WCA 6
Noctule bat <i>Nyctalus noctula</i>	1	2008	427 m north-east	✓	✓	ECH 4, WCA 5, WCA 6
Common pipistrelle <i>Pipistrellus pipistrellus</i>	3	2008	427 m north-east	-	✓	ECH 4, WCA 5, WCA 6
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	3	2008	427 m north-east	✓	✓	ECH 4, WCA 5, WCA 6

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

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Study Area	Species of Principal Importance?	Local BAP?	Legislation / Conservation Status
Amphibians						
Common frog <i>Rana temporaria</i>	9	2010	247 m east	-	-	WCA 5 S9(5)
Smooth newt <i>Lissotriton vulgaris</i>	2	2010	699 m north-west	-	-	WCA 5 S9(5)
Common toad <i>Bufo bufo</i>	2	2010	699 m north-west	✓	-	WCA 5 S9(5)
Birds						
Redwing <i>Turdus iliacus</i>	2	2010	754 m north	-	-	WCA1i
Fieldfare <i>Turdus pilaris</i>	1	2010	953 m north	-	-	WCA1i
Kingfisher <i>Alcedo atthis</i>	1	2004	978 m east	-	-	WCA1i
Eurasian hobby <i>Falco subbuteo</i>	3	2006	Confidential	-	-	WCA1i
Invertebrates - Terrestrial						
Stag beetle <i>Lucanus cervus</i>	7	2009	465 m east	✓	✓	ECH 2, WCA 5 S9(5)
<p>Key: #: Dependent on species. 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(1): Schedule 5 Section 9(1) of Wildlife and Countryside Act 1981 (as amended). Protected animals (other than birds). Protection limited to intentional killing, injury or taking. 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. Species of Principal Importance: Species of principal importance for nature conservation in England. Local BAP: London Local Biodiversity Action Plan.</p> <p>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).</p>						

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

In addition to the above species the following notable species were also identified by the desk study:

Birds

The desk study identified records of house sparrow *Passer domesticus* within the 1 km search area. This species is listed as a Species of Principal Importance for Nature Conservation in England, on the Local BAP and as a London BAP Priority Species.

A single record of lesser redpoll *Carduelis cabaret* was identified by the desk study which is listed as a Species of Principal Importance for Nature Conservation in England.

Records of herring gull *Larus garzetta*, lesser spotted woodpecker *Dendropos minor*, dunnock *Prunella modularis*, song thrush *Turdus philomelos*, carrion crow *Corvus corone subsp. corone*, starling *Sturnus vulgaris* and common redpoll *Carduelis flammea* were identified by the desk study. These species are London BAP Priority Species.

Plants

A single record of grape-hyacinth *Muscari neglectum* was identified by the desk study which is listed as a Species of Principal Importance for Nature Conservation in England.

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 / Conservation Status
Flora				
Buddleia <i>Buddleja davidii</i>	7	2010	220 m north-west	LISI 3
Japanese knotweed <i>Fallopia japonica</i>	14	2011	220 m north-west	WCA9, LISI 3, WFD UK TAG
Indian balsam <i>Impatiens glandulifera</i>	1	2011	297 m south-west	WCA9, LISI 3, WFD UK TAG
Cherry laurel <i>Prunus laurocerasus</i>	8	2010	350 m south-west	LISI 3
Snowberry <i>Symphoricarpos albus</i>	5	2004	371 m south-east	LISI 2
Evergreen oak <i>Quercus ilex</i>	2	2010	477 m north	LISI 2
Spanish bluebell <i>Hyacinthoides hispanica</i>	4	2010	699 m north-west	WCA9
Floating pennywort <i>Hydrocotyle ranunculoides</i>	2	2010	699 m north-west	WCA9, LISI 3, WFD UK TAG
Turkey oak <i>Quercus cerris</i>	1	2004	863 m south-east	LISI 2
Cotoneaster <i>Cotoneaster sp.</i>	6	2010	869 m south-west	LISI 2
Giant hogweed <i>Heracleum mantegazzianum</i>	1	2004	924 m west	WCA9
Yellow archangel <i>Lamium galeobdolon subsp. argentatum</i>	1	2010	953 m north	WCA9, LISI 4

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

Key:

WCA9: Schedule 9 of Wildlife and Countryside Act 1981 (as amended). Invasive, non-native, plants and animals.

LISI2: London Invasive Species Initiative – Species of high impact or concern present at specific sites that require attention (control, management, eradication etc).

LISI3: London Invasive Species Initiative – Species of high impact or concern which are widespread in London and require concerted, coordinated and extensive action to control/eradicate.

LISI4: London Invasive Species Initiative – Species which are widespread for which eradication is not feasible but where avoiding spread to other sites may be required.

WFD UK TAG: Water Framework Directive Technical Advisory Group alien species.

Table 3.3 (Continued): 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 C116284D-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 24th February 2014 by Amy Finnegan (Ecological Project Officer) Table 4.1 details the weather conditions at the time of the survey.

Parameter	Condition
Temperature (°C)	12
Cloud (%)	30
Wind (Beaufort)	F3
Precipitation	Dry

Table 4.1: Weather Conditions During Survey Period

4.2 SURVEY CONSTRAINTS

The rear garden area behind the two-storey caretaker house in the north-western part of the site could not be accessed during the site survey.

February is not an optimal time for completing botanical assessments however, given the nature of the habitats present, this was not considered to be a significant constraint to a robust initial site assessment.

4.3 HABITATS

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

- Amenity Grassland;
- Bare Ground;
- Buildings;
- Dense Scrub;
- Fencing;
- Hardstanding;
- Introduced Shrub;
- Other Habitat: Allotment;
- Poor Semi-improved Grassland;
- Scattered Scrub;
- Scattered Trees;
- Species-poor Intact Hedgerows;
- Standing Water; and,

- Wall.

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

Amenity Grassland

A small area of amenity grassland was noted within the south-western part of the site. This habitat was short mown and managed as a pathway. Species present included clover *Trifolium* sp., dandelion *Taraxacum officinale* agg., perennial rye-grass *Lolium perenne*, dove's-foot crane's-bill *Geranium molle* and ribwort plantain *Plantago lanceolata*. Daffodil *Narcissus* sp. was occasionally noted within this habitat.

Bare Ground

Bare ground was located under the trees in the south-western part of the site. This habitat was devoid of vegetation.

Buildings

The site comprised a main brick-built school building with multiple pitched tiled roof areas which dominated the survey area. A two-storey, brick-built caretaker house was situated in the north-western part of the site, and a one-storey port-a-cabin building was situated adjacent to the western site boundary. A pitched tiled roof cover was also situated within the playground area in the eastern part of the site. Lifted tiles were noted on the main school building.

Dense Scrub

A small area of dense scrub was noted within the small fenced-off garden area in the south-western part of the site. This habitat was young to semi-mature, and included hawthorn *Crataegus monogyna*, elder *Sambucus nigra*, rose *Rosa* sp. and low growing bramble *Rubus fruticosus* agg. Some nettle *Urtica dioica* was also noted within this habitat.

Fence

Metal fencing measuring approximately 1.5 m in height formed the northern, western and southern site boundaries. This habitat was devoid of vegetation.

Hardstanding

Concrete and tarmac surfaces surrounded building areas and formed pathways. Some short perennial species were noted at the edges of this habitat, including dandelion and perennial rye-grass. However, the majority of this habitat was devoid of vegetation.

Introduced Shrub

Wooden, brick and earth planters containing introduced shrub were scattered throughout the site, around building and playground areas. Species present included honeysuckle *Lonicera* sp., *Viburnum* sp., privet

Ligustrum sp., *Hebe* sp., *Mahonia* sp., laurel *Prunus* sp., rose and ivy *Hedera helix*. A cotoneaster species resembling *Cotoneaster simonsii* was noted within a planter situated in the westernmost playground area (Target Note 1).

Other Habitat: Allotment

A small allotment, comprising wooden planters filled with earth, was noted in the south-western part of the site. Species present within these planters included cabbage *Brassica* sp., some perennial rye-grass, dandelion and cow parsley *Anthriscus sylvestris*.

Poor Semi-improved Grassland

A small section of poor semi-improved rough grassland was situated in the south-western part of the site. This habitat had not been recently managed, and species present included dandelion, perennial rye-grass, daisy *Bellis perennis*, cock's-foot *Dactylis glomerata*, dove's-foot crane's-bill and clover.

Scattered Scrub

Scattered scrub was noted within the south-western part of the site, adjacent to the fence line. Species present included ivy and low growing bramble. Some cow parsley, ivy and nettle were also noted within this habitat. In addition, brash piles were noted within the habitat, comprising dead vegetation, wood and general rubbish (Target Note 4).

Scattered Trees

Numerous trees were scattered throughout the site. Young cherry *Prunus* sp., birch *Betula* sp., willow *Salix* sp., horse chestnut *Aesculus hippocastanum* and beech *Fagus sylvatica* trees were scattered within hardstanding playground areas. Semi-mature alder *Alnus glutinosa* trees were also noted within the playground areas in the north-western and southern parts of the site. A group of semi-mature trees were noted within the western part of the site. Some of these trees were covered with light to moderate ivy (Target Note 3), and species present included maple *Acer* sp., cherry, alder and sycamore *Acer pseudoplatanus*. Scattered young and semi-mature trees were also noted within the western part of the site, along the western site boundary. Species present included beech, cherry and maple sp. A number of trees were overhanging the southern and western boundaries of the site.

Species-poor Intact Hedgerows

Two sections of hedgerow, measuring approximately 20 m in length and 1.5 m in height, were situated adjacent to the south-eastern and south-western site boundaries. Species present included beech and hawthorn. Some hazel *Corylus avellana* and rose sp. were also noted.

Standing Water

A small artificial pond was situated in the south-western part of the site, adjacent to the allotment area. This pond measured approximately 8 m² and comprised approximately 0.4 m of water. The pond was artificial with

a rubber liner which appeared to be in good condition. Duckweed *Lemnaceae sp.* was noted within the pond, and the pond itself was surrounded by semi-improved rough grassland.

Wall

A brick wall formed the eastern site boundary. This habitat measured approximately 2 m in height and was in good condition. Dense ivy was noted on a section of this wall (Target Noted 2).

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 woodpigeon *Columba palumbus* was recorded on site during the field survey.

4.5 INVASIVE SPECIES

A cotoneaster species resembling Himalayan cotoneaster *Cotoneaster simonsii* was recorded within a planter situated within the western play ground area (Target Note 1).

5. DISCUSSIONS AND CONCLUSIONS

5.1 SUMMARY OF PROPOSALS

Plans provided by the client indicate that there are currently two options for the proposed development; 'Option A' and 'Option C'.

It is understood that 'Option A' involves the demolition of the 'caretaker house', 'music and arts store' and 'KS2' building. A new two-storey building will then be constructed in this part of the site, the main entrance will be moved to the west of the existing main entrance, and temporary mobiles will be positioned in the south-eastern corner of the site.

It is understood that 'Option C' involves the demolition of the 'caretaker house', 'music and arts store', 'KS2' building and 'WC's and cloaks'. A new three-storey 'teaching and admin' building, 'hall' and 'service yard' will then be constructed in this part of the site, and two new main entrances will be constructed along the northern site boundary.

5.2 NATURE CONSERVATION SITES

European Statutory Sites

The desk study revealed that there is one nature conservation site with European statutory protection within a 1 km radius of the survey area. 'Epping Forest' Special Area of Conservation is located 760 m south-west of the survey area. Due to the small-scale nature of the development, the built-up nature of the intervening habitats, and the distance between the conservation site and the study site, it is unlikely that this site will be directly or indirectly impacted by the proposed development. Nevertheless, a precautionary consultation with Natural England has been recommended in Section 6.1.

UK Statutory Sites

The desk study also revealed that there are two nature conservation sites with UK statutory protection within a 1 km radius of the survey area. 'Ainslie Wood' Local Nature Reserve is located 510 m north of the survey area, and 'Epping Forest' Site of Special Scientific Interest is located 760 m south-west. Due to the small-scale nature of the development, the built-up nature of the intervening habitats, and the distance between the conservation sites and the study site, it is unlikely that these sites will be directly or indirectly impacted by the proposed development. Therefore, UK statutory sites are not a notable consideration in relation to the proposed development.

Non-Statutory Sites

The desk study revealed that there are four sites with non-statutory protection within a 1 km radius of the survey area. 'Ching Brook in Central Walthamstow' Site of Borough Grade II Importance for Nature Conservation is the closest non-statutory site, and is located 40 m south of the survey area. It is considered unlikely that this habitat will be directly or indirectly impacted by the proposed development, due to the lack of

running water on site, the small-scale nature of the development, the built-up nature of the intervening habitats, and the distance between the conservation site and the study site.

The next closest non-statutory site is 'Ainslie Wood' Site of Borough Grade I Importance for Nature Conservation, located 510 m north. Due to the small-scale nature of the development, the built-up nature of the intervening habitats, and the distance between the remaining non-statutory conservation sites and the study site, it is unlikely that these non-statutory nature conservation sites will be directly or indirectly impacted by the proposed development. Therefore, non-statutory sites are not a notable consideration in relation to the proposed development.

5.3 HABITATS

The ecological importance of the habitats present on site is determined by their presence on the list of Habitats of Principal Importance in England and on the Local BAP. 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	Habitats of Principal Importance?	Local BAP?	Will habitat be impacted?	Is habitat a notable consideration?
Amenity Grassland	-	✓ ¹	No	No
Bare ground	-	✓ ¹	No	No
Buildings	-	-, *	Yes	No
Dense Scrub	-	✓ ¹	No	No
Fencing	-	-, *	Yes	No
Hardstanding	-	-, *	Yes	No
Introduced Shrub	-	-	Yes	No
Other Habitat: Allotment	-	✓ ¹	No	No
Poor Semi-improved Grassland	-	✓ ¹	No	No
Scattered Scrub	-	✓ ¹	No	No
Scattered Trees	-	✓ ¹	Yes	Yes
Species-poor Intact Hedgerows	✓*	✓ ¹	No	No
Standing Water	✓**	✓ ²	No	No
Wall	-	-, *	Yes	No

Key:
Habitats of Principal Importance for Nature Conservation in England
 ✓*: 'Hedgerows'.
 ✓**: 'Ponds'. Ponds must meet one or more of the relevant criteria (e.g. contain species of high conservation importance, such as great crested newt). An initial site visit does not allow ponds to be assessed for these criteria.

Local BAP
 ✓¹: 'Parks and urban greenspaces'.
 ✓²: 'Standing water'.
 *: 'Built Structures' are noted as 'other important habitats' on the Local BAP.

Table 5.1: Summary of Ecological Importance of Habitats on Site

Scattered Trees

The semi-mature trees on site are of intrinsic value as they cannot be easily replaced in the short to medium term. In addition, 'parks and urban greenspaces' are included on the Local BAP, and some of the trees on site are located within the soft landscaping area in the south-western part of the site. It is understood that some of the trees in the playground area will be removed. A recommendation regarding the protection of semi-mature trees which are to be retained is made in Section 6.2. The young trees can be easily replaced post development and as such, are not a notable consideration.

Buildings, Fencing, Hardstanding and Wall

'Built structures' are noted as 'other important habitats' on the Local BAP as they have the potential to support a number of protected and notable species. However 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. These habitats are common in the locality and can be easily replaced. It is understood that these habitats will be adversely impacted by the proposed development, however they are not of notable consideration.

Hedgerows

'Hedgerows' are a Habitat of Principal Importance for Nature Conservation in England if they measure over 20 m in length and less than 5 m in width, consist predominantly of at least one woody UK native species, and any gaps measure less than 5 m in width. The hedgerows on site fulfil these criteria. In addition, 'parks and urban greenspaces' are included on the Local BAP, and one of these hedgerows is located within the soft landscaping area in the south-western part of the site. It is understood that this habitat will not be adversely impacted by the proposed works and as such, it is not a notable consideration in relation to the proposed development.

Standing Water

'Ponds' are a Habitat of Principal Importance for Nature Conservation in England if they meet one or more of the relevant criteria (e.g. contain species of high conservation importance, such as great crested newt). An initial site visit does not allow ponds to be assessed for these criteria and as such, there is potential for the ponds on site to qualify as Habitats of Principal Importance for Nature Conservation in England. It is understood that this habitat will not be adversely impacted by the proposed development. Nevertheless, a precautionary recommendation has been made in Section 6.2.

Grassland, Bare Ground, Scrub and Allotment

'Parks and urban greenspaces' are included on the Local BAP, and grassland, bare ground, scrub and allotment form part of a soft landscaping area in the south-western part of the site. However, it is understood that this habitat will not be adversely impacted by the proposed development and as such, it is not a notable consideration in relation to the proposed development.

Introduced Shrub

This habitat is well represented locally and can easily be replaced within the new development. It is understood that this habitat will be adversely impacted by the proposed development, however it is not of notable consideration.

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	Suitable Habitats Within Survey Area	Could Species be Impacted, if Present?
Mammals		
Bats	Roosting: buildings Foraging: scrub, shrub, allotment, trees, hedgerows, standing water	Yes
Badger	None	No
Hedgehog	All grassland, scrub, shrub, allotment, hedgerows, brash piles	Yes
Water vole	None	No
Otter	None	No
Amphibians	Breeding: standing water Terrestrial: scrub, shrub, allotment, semi-improved grassland, hedgerows, brash piles	Yes
Reptiles	Scrub, shrub, allotment, semi-improved grassland, hedgerows, standing water, brash piles	Yes
Birds	Nesting: buildings, scrub, shrub, trees, hedgerows Foraging: all	Yes
Notable invertebrates		
Notable aquatic invertebrates	Standing water	No
Notable terrestrial invertebrates	Dead wood, brash piles	Yes
Notable plants	None	No

Table 5.2: Summary of Ecological Importance of Species on Site

Mammals

Bats

The desk study provided twenty-one records of at least three bat species located within 1 km of the site. The nearest record was located 159 m south, and the most recent records were from 2008. The scattered trees on site were in generally good condition, with no rot holes or crevices noted. However, potential bat roosting features such as lifted tiles were noted on the main school building. In addition, the scrub, introduced shrub, allotment, scattered trees, hedgerows and standing water on site provide potential foraging and commuting habitat. It is understood that buildings, introduced shrub and scattered trees will be adversely impacted by the proposed development. Therefore, bats are a notable consideration in relation to the proposed

development, and recommendations regarding surveys and lighting have been made in Section 6.3. Recommendations regarding habitat loss and enhancement have also been made in Section 6.2.

Badger

The desk study did not provide any records of badger located within 1 km of the site. The scrub, introduced shrub, allotment, semi-improved grassland and hedgerows on site are considered to provide suboptimal sett building, foraging and commuting habitat for this species, as they are limited in extent and have limited connectivity to potential habitat in the local area (e.g. the brook corridor to the south of the site). In addition, no evidence of this species was recorded on site during the field survey, such as setts, latrines or prints. Therefore, badger are not a notable consideration in relation to the proposed development.

Hedgehog

The desk study did not provide any records of hedgehog located within 1 km of the site. All of the grassland on site provides potential foraging habitat for this species, while the scrub, introduced shrub, allotment and hedgerows provide potential refuge habitat. In addition, the site has some connectivity to residential gardens, which can provide good habitat for hedgehog. It is understood that introduced shrub will be adversely impacted by the proposed development. Therefore, hedgehog are a notable consideration in relation to the proposed development, and recommendations regarding excavations and vegetation clearance have been made in Section 6.3. Recommendations regarding habitat loss and enhancement have also been made in Section 6.2.

Water vole and otter

The desk study did not provide any records of water vole and otter located within 1 km of the site. There is no suitable habitat for these species located on site and as such, they are not a notable consideration in relation to the proposed development.

Amphibians

The desk study provided nine records of common frog and two records of smooth newt located within 1 km of the site. These species are protected from sale only and as such, are not a notable consideration in relation to the proposed development.

The desk study also provided two records of common toad located within 1 km of the site. The nearest record was located 699 m north-west of the site, and the most recent record was from 2010. The scrub, introduced shrub, allotment, semi-improved grassland and hedgerows on site are considered to provide suboptimal habitat for this species during the terrestrial phase of its lifecycle, as they are limited in extent and isolated from potential habitat in the local area. In addition, the pond on site is deemed to provide suboptimal breeding habitat due to a lack of suitable egg laying habitat. Reference to aerial imagery and Ordnance Survey mapped data suggests that there are no additional waterbodies located within 500 m of the site (excluding garden ponds). It is understood that the area of soft landscaping in the south-western part of the site (including scrub, allotment, hedgerow, dead wood, brash piles, scattered trees, semi-improved grassland

and standing water) will not be impacted by the development. However, if the proposed plans alter and this area is to be impacted by the proposed development, then the precautionary recommendations regarding vegetation clearance should be followed (see Section 6.3). Recommendations regarding habitat loss and enhancement have also been made in Section 6.2.

Reptiles

The desk study did not provide any records of reptile species located within 1 km of the site. The scrub, introduced shrub, allotment, semi-improved grassland, hedgerows and standing water on site are considered suboptimal for reptile species. This is because they are limited in extent and have limited connectivity to potential habitat located in the wider area (e.g. the railway corridor to the east of the site, and the brook corridor to the south). It is understood that the area of soft landscaping in the south-western part of the site (including scrub, allotment, hedgerow, dead wood, brash piles, scattered trees, semi-improved grassland and standing water) will not be impacted by the development. However, if the proposed plans alter and this area is to be impacted by the proposed development, then the precautionary recommendation regarding vegetation clearance should be followed (see Section 6.3). Recommendations regarding habitat loss and enhancement have also been made in Section 6.2.

Birds

The desk study provided seven records of four bird species listed under Schedule 1 Part 1 of the Wildlife and Countryside Act 1981 (as amended), including: redwing, fieldfare, kingfisher and Eurasian hobby. The specific breeding ranges and habitat requirements of these species mean that they are unlikely to nest on site. Schedule 1 birds are therefore not a notable consideration in relation to the proposed development.

The desk study also provided records of two species listed as Species of Principal Importance for Nature Conservation in England (house sparrow and lesser redpoll), and seven species listed as London BAP Priority Species (herring gull, lesser spotted woodpecker, dunnoek, song thrush, carrion crow, starling and common redpoll). A woodpigeon was recorded on site during the field survey. The buildings, scrub, introduced shrub, scattered trees and hedgerows on site provide potential nesting opportunities for a variety of common bird species, and the site also provides potential foraging habitat. It is understood that buildings, introduced shrub and scattered trees will be adversely impacted by the proposed development. If the works are undertaken in the bird nesting season then there is potential for impact upon nesting birds and as such, a recommendation has been made in Section 6.3. It is considered that the works should not adversely impact upon birds in the long-term, providing that recommendations made within 6.2 regarding habitat loss and enhancement are followed.

Notable invertebrates

Notable aquatic invertebrates

The desk study did not provide any records of notable aquatic invertebrate species located within 1 km of the site. The standing water on site provides potential habitat for such species, however it is understood that this

habitat will not be impacted by the proposed development. Therefore, notable aquatic invertebrates are not a notable consideration in relation to the proposed development.

Notable terrestrial invertebrates

The desk study provided seven records of stag beetle located within 1 km of the site. The nearest record was located 465 m east of the site, and the most recent record was from 2009. This species requires dead wood habitat for foraging, and dead wood and brash piles were noted within the western section of the site. It is understood that the area of soft landscaping in the south-western part of the site (including dead wood and brash piles) will not be impacted by the development. However, if the proposed plans alter and this area is to be impacted by the proposed development, then the recommendation regarding the removal of dead wood and brash piles should be followed (see Section 6.3). Precautionary recommendations regarding habitat loss and enhancement have also been made in Section 6.2.

Notable plants

The desk study provided one record of grape-hyacinth, which is listed as a Species of Principal Importance for Nature Conservation in England. This species is apparent between November and June, and was not recorded on site during the field survey. As such, grape-hyacinth is not a notable consideration in relation to the proposed development.

5.5 INVASIVE SPECIES

Invasive Plant Species

The desk study provided fifty-two records of twelve invasive plant species located within 1 km of the site, including: buddleia, Japanese knotweed, Indian balsam, cherry laurel, snowberry, evergreen oak, Spanish bluebell, floating pennywort, turkey oak, cotoneaster, giant hogweed and yellow archangel. The nearest records were of buddleia and Japanese knotweed, located 220 m north-west of the site, and the most recent records were of Japanese knotweed and Indian balsam, from 2011. A cotoneaster species resembling Himalayan cotoneaster *Cotoneaster simonsii* was recorded within a planter situated within the western play ground area (Target Note 1). Himalayan cotoneaster is listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). Cotoneaster are notoriously difficult to identify and readily hybridise. As such, a precautionary approach has been taken, and the cotoneaster on site will be regarded as Himalayan cotoneaster. A recommendation has been made in Section 6.4. No other invasive plant species were recorded on site during the field survey.

Invasive Animal Species

The desk study did not provide any records of invasive animal species located within 1 km of the site, and none were recorded on site during the field survey. It is an offence under Schedule 9 Part 1 (Section 14) of the Wildlife and Countryside Act 1981 (as amended) to release or allow certain species to escape into the wild without a licence. However, the proposed development will not allow any such species to escape into the wild. Therefore, invasive animal species are not a notable consideration in relation to the proposed development.

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

6. RECOMMENDATIONS

All recommendations made below are subject to change once the details of the proposed works are finalised. Once the extent of the proposed development is known all recommendations should be reviewed and amended as appropriate.

6.1 NATURE CONSERVATION SITES

- **SAC:** The proposed works could potentially directly or indirectly impact upon Epping Forest which is designated as a Special Area of Conservation. As such, Natural England should be consulted prior to any works commencing to discuss the likelihood of any impacts on this nature conservation site. Consultation with Natural England with respect to the potential effects on Epping Forest will be required to identify the requirements for Appropriate Assessment of the proposals under the Habitat Regulations.

6.2 HABITATS

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

- **Habitat Loss & Enhancement:** 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 of habitats which will be of value to wildlife, such as:
 - native seed/fruit bearing species to provide foraging habitat for mammals and birds;
 - nectar-rich species to attract bees, butterflies and moths;
 - wildflower grassland margins to provide larval food for caterpillars and to attract butterfly and moth species such as cinnabar, horehound long-horn moth; and,
 - species which attract night flying insects which will be of value to foraging bats, for example: evening primrose *Oenothera biennis*, goldenrod *Solidago virgaurea*, honeysuckle *Lonicera periclymenum* and fleabane *Pulicaria dysenterica*.
 - Inclusion of hedgehog passes under any fence lines to allow connectivity between the site and the wider area.
 - Provision of nesting/roosting habitat, such as installation of nest boxes for species such as house sparrow, dense scrub for species such as song thrush, and bat boxes for species such as pipistrelle.
 - Creation of deadwood habitat for amphibian, reptile and terrestrial invertebrate species (e.g. stag beetle).
- **Notable Habitat:** The hedgerows on site are listed as Habitats of Principal Importance for Nature Conservation in England and one of the hedgerows forms part of a habitat which is listed on the Local

BAP. As such, this habitat should be retained and protected. If this is not possible, then the minimum amount should be removed, or the habitat should be recreated afterwards. Habitat recreation should involve the planting of native and wildlife attracting species which are appropriate for the site and are of adequate maturity and length to help mitigate the loss of the existing habitats as suitable commuting corridors for bats and other fauna.

- **Trees and Hedgerows:** 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.
- **Protect Waterbodies and Watercourses:** All works should be undertaken in accordance with best practice, e.g. the Environment Agency's Pollution Prevention Guidelines, to ensure that the waterbodies and watercourses within the survey area are not adversely impacted by the proposed works.

6.3 PROTECTED / NOTABLE SPECIES

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

- **Roosting Bats:** To ensure compliance with the Wildlife and Countryside Act 1981 (as amended), an initial bat survey should be undertaken on buildings which may be impacted by the proposed development works. 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).
- **Foraging Bats:** Bats are likely to use hedgerows, scrub, trees and standing water for foraging and commuting. Therefore, any lighting, either temporary or permanent, along the site boundaries should be kept to a minimum and directed away from the boundary features to maintain 'dark' areas and corridors.
- **Terrestrial Mammals (including Hedgehog):** Any excavations that need to be left overnight should be covered or fitted with mammal ramps to ensure that any animals that enter can safely escape. Any open pipework with an outside diameter of greater than 150mm must be blanked off at the end of each work day to prevent badgers entering/becoming trapped.
- **Hedgehog and Common Toad:** Vegetation clearance/removal should be undertaken in a sensitive manner to avoid harming hedgehogs and common toads. If any are found during the course of site-based works they should be removed carefully to a suitably undisturbed location within the near vicinity.
- **Amphibians and Reptiles:** It is understood that the area of soft landscaping in the south-western part of the site (including scrub, allotment, hedgerow, dead wood, brash piles, scattered trees, semi-improved grassland and standing water) will not be impacted by the development. However, if the proposed plans alter and this area is to be impacted by the proposed development, then it is recommended that a method statement is produced to ensure that any amphibian/reptile species will not be harmed. This should include habitat manipulation, under the supervision of an experienced

ecologist, prior to works commencing. This should be completed when amphibians/reptiles are active. This is weather dependent but generally extends between March and October inclusive.

- **Nesting Birds:** To ensure compliance with the Wildlife and Countryside Act 1981 (as amended), building demolition and vegetation clearance 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 building or vegetation that is to be removed or disturbed 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.
- **Stag Beetle:** Any log/brash piles should be left in situ. However, if the proposed works are to impact the area of soft landscaping in the south-western part of the site, then the log/brash piles should be relocated to a suitable habitat by an experienced ecologist.

6.4 INVASIVE PLANT SPECIES

- **Himalayan cotoneaster:** To ensure compliance with the Wildlife and Countryside Act 1981 (as amended) the works must not cause Himalayan cotoneaster to spread in the wild.

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APPENDICES

APPENDIX 1: Desk Study Data

APPENDIX 2: Middlemarch Environmental Ltd Drawing C116284D-01-01
Extended Phase 1 Habitat Survey

APPENDIX 3: Overview of Relevant Legislation

APPENDIX 1

Desk Study Data

The data contained in this appendix is confidential and cannot be reproduced.

SITE CHECK REPORT

You selected the location: Centroid Grid Ref: TQ381915

The following features have been found in your search area:

Local Nature Reserves (England)

Reference 1009359
Name AINSLIE WOOD
Hectares 2.06
Hyperlink http://www.lnr.naturalengland.org.uk/special/lnr/lnr_details.asp?themeid=1009359

Sites of Special Scientific Interest (England)

Name EPPING FOREST
Reference 1001669
Natural England Contact NEIL FULLER
Natural England Phone Number 0845 600 3078
Hectares 1790.3
Citation 1001814
Hyperlink http://www.sssi.naturalengland.org.uk/special/sssi/sssi_details.cfm?sssi_id=1001814

Special Areas of Conservation (England)

Name EPPING FOREST
Reference UK0012720
Hectares 1630.74
Hyperlink <http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?eucode=UK0012720>

National Nature Reserves (England)

No Features found

Ramsar Sites (England)

No Features found

Special Protection Areas (England)

No Features found



Selwyn Primary School, Highams Park



Legend

- Local Nature Reserves (England)
- National Nature Reserves (England)
- Ramsar Sites (England)
- Sites of Special Scientific Interest (England)
- Special Areas of Conservation (England)
- Special Protection Areas (England)

Projection = OSGB36

xmin = 534700

ymin = 189900

xmax = 541700

ymax = 193300

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APPENDIX 2

Middlemarch Environmental Ltd Drawing C116284D-01-01
Extended Phase 1 Habitat Survey

Legend

- - - Site boundary
 - X Scattered scrub
 - Scattered tree
 - ++++ Fence
 - Species-poor intact hedgerow
 - Wall
 - A Amenity grassland
 - Bare ground
 - Building
 - Hardstanding
 - Dense scrub
 - Introduced shrub
 - No access
 - Other habitat - allotment wooden planters
 - SI Poor semi-improved grassland
 - Standing water
 - Target note
- 1 = Cotoneaster sp. resembling *simonsii*
 2 = Dense ivy *Hedera helix* on wall
 3 = Trees with light to moderate ivy
 4 = Brash piles, rubble and dead vegetation



Project	Selwyn Primary School, Highams Park, Greater London		
Drawing	Extended Phase 1 Habitat Survey		
Client	Mace Ltd		
Drawing Number	C116284D-01	Revision	00
Scale @ A3	1:800	Date	February 2014
Approved By	AF	Drawn By	CC

MIDDLEMARCH ENVIRONMENTAL

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

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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, AS AMENDED (HABITATS REGULATIONS 2010, AS AMENDED)

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 Habitats Regulations 2010 were amended in August 2012 to ensure clearer transposition of the provisions of Articles 2, 3, 4(4) (second sentence) and Article 10 of the Wild Birds Directive, by giving additional and specific duties to relevant bodies. A number of amendments were also made to transpose more clearly certain elements of the Habitats Directive.

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, was a government initiative designed to implement the requirements of the Convention of Biological Diversity to conserve and enhance species and habitats. The UKBAP contained a list of priority habitats and species of conservation concern in the UK, and outlined biodiversity initiatives designed to enhance their conservation status. The priority habitats and species correlated with those listed on Section 41 and 42 of the NERC Act.

The UK BAP required that conservation of biodiversity was 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.

SPECIES AND HABITATS OF MATERIAL CONSIDERATION FOR PLANNING IN ENGLAND

In 2011, the government published the 'Biodiversity 2020: A strategy for England's wildlife and ecosystem services' to replace the previous England Biodiversity Strategy. In 2012 the UK BAP was itself replaced by the UK Post-2010 Biodiversity Framework.

Previous planning policy (and some supporting guidance which is still current, e.g. ODPM Circular 06/2005, now under revision), refers to UK BAP species as being a material consideration in the planning process. Equally many local plans refer to BAP priority habitats and species. Both remain as material considerations in the planning process but such habitats and species are now described as Species and Habitats of Principal Importance for Conservation in England, or simply priority habitats and priority species under the UK Post-2010 Biodiversity Framework. The list of habitats and species remains unchanged and is still derived from Section 41 list of the Natural Environmental and Rural Communities (NERC) Act 2006. As was previously the case when it was a BAP priority species hen harrier continues to be regarded as a priority species although it does not appear on the Section 41 list.

PLANNING POLICY

NATIONAL PLANNING POLICY FRAMEWORK

In early 2012, the National Planning Policy Framework (NPPF) replaced much previous planning policy guidance, including Planning Policy Statement 9: Biological and Geological Conservation. The government circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact within the Planning System, which accompanied PPS9, still remains valid. A presumption towards sustainable development is at the heart of the NPPF. This presumption does not apply however where developments require appropriate assessment under the Birds or Habitats Directives.

Chapter 11, on conserving and enhancing the natural environment, sets out how the planning system should contribute to and enhance the natural and local environment by minimising impacts on biodiversity and, where possible, provide net gains in biodiversity. Opportunities to incorporate biodiversity gains into a development should be encouraged.

If a proposed development would result in significant harm to the natural environment which cannot be avoided (through the use of an alternative site with less harmful impacts), mitigated or compensated for (as a last resort) then planning permission should be refused.

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, as amended (Habitats Regulations 2010, as amended). 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 (as amended), 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 (as amended) 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 Species of Principal Importance for Nature Conservation in England:

Barbastelle Bat *Barbastella barbastellus*, Bechstein's Bat *Myotis bechsteinii*, 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*.

All bat species which occur within the county are priority species on the London Local BAP.

HEDGEHOG

Hedgehogs receive some protection under Schedule 6 of the Wildlife and Countryside Act 1981 (as amended); this section of the Act lists animals which may not be killed or taken by certain methods, namely traps and nets, poisons, automatic weapons, electrical devices, smokes/gases and various others. Humane trapping for research purposes requires a licence.

Hedgehogs are a Species of Principal Importance for Nature Conservation in England and are thus capable of being material considerations in the planning process.

COMMON AMPHIBIANS

Common frogs, common toad, smooth newt and palmate newt are protected in Britain under Schedule 5 of the Wildlife and Countryside Act (1981, as amended) with respect to sale only. They are also listed under Annex III of the Bern Convention 1979. Any exploitation of wild fauna specified in Appendix III shall be regulated in order to keep the populations out of danger. The convention seeks to prohibit the use of all indiscriminate means of capture and killing and the use of all means capable of causing local disappearance of, or serious disturbance to, populations of a species.

Common toad is listed as a Species of Principal Importance for Nature Conservation in England.

REPTILES

All of the UK's native reptiles are protected by law. The two rarest species – sand lizard (*Lacerta agilis*) and smooth snake (*Coronella austriaca*) – benefit from the greatest protection; however there is no suitable habitat for these species located on site. Common lizard (*Zootoca vivipara*), slow-worm (*Anguis fragilis*), adder (*Vipera berus*) and grass snake (*Natrix natrix*) are protected under the Wildlife and Countryside Act 1981 as amended from intentional killing or injuring.

In England and Wales, this Act has been amended by the Countryside and Rights of Way Act 2000 (CRoW), which adds an extra offence, makes species offences arrestable, increases the time limits for some prosecutions and increases penalties. 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. All native reptile species are included on these lists.

This is a simplified description of the legislation. In particular, the offences mentioned here may be absolute, intentional, deliberate or reckless. Note that where it is predictable that reptiles are likely to be killed or injured by activities such as site clearance, this could legally constitute intentional killing or injuring.

All reptile species which occur within the county are priority species on the London Local BAP.

BIRDS

The Conservation of Habitats and Species Regulations 2010 (as amended) places a duty on public bodies to take measures to preserve, maintain and re-establish habitat for wild birds.

Nesting and nest building birds are protected under the Wildlife and Countryside Act WCA 1981 (as amended).

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.

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 or recklessly:

- disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or
- disturbs dependent young of such a bird, he shall be guilty of an offence.

Several bird species are Species of Principal Importance for Nature Conservation in England, making them capable of being material considerations in the planning process.

STAG BEETLE

The stag beetle is in decline globally. It is listed on Annex II of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora (a list of animal and plant species of community interest whose conservation requires the designation of Special Areas of Conservation). Stag beetle also receives protection under Schedule 5 of the Wildlife and Countryside Act 1981, as amended, making the following activities illegal: 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. Stag

beetle is also listed as a Species of Principal Importance for Nature Conservation in England and a priority species on the London Local BAP.

INVASIVE PLANTS

The Wildlife and Countryside Act 1981 provides the primary controls on the release of non-native species into the wild in Great Britain. It is an offence under section 14(2) of the Act to 'plant or otherwise cause to grow in the wild' any plant listed in Schedule 9, Part II. This list contains 36 plant species and their hybrids, and includes Himalayan cotoneaster.

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QUALITY ASSURANCE

SELWYN PRIMARY SCHOOL, 102 CAVENDISH ROAD,
HIGHAMS PARK, GREATER LONDON

EXTENDED PHASE 1 HABITAT SURVEY

A Report to Mace Ltd

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Checked by:

Anna Dudley
Principal Technical Ecological Consultant

Approved by:

Dr Philip Fermor
Managing Director