# 613-619 SOUTHCHURCH ROAD, SOUTHEND

# PRELIMINARY ECOLOGICAL APPRAISAL

A Report to: AWW Architects

Report No: RT-MME-155176-03

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## REPORT VERIFICATION AND DECLARATION OF COMPLIANCE

This study has been undertaken in accordance with British Standard 42020:2013 "Biodiversity, Code of practice for planning and development".

Report Version	Date	Completed by:	Checked by:	Approved by:
Final	15/06/2021	Sophie Moy MSc (Senior Ecological Consultant) and Maria Valeva BSc (Ecological Support Officer)	Paul Roebuck BSc MSc MCIEEM (South East Manager)	Tom Docker CEcol MCIEEM (Managing Director)

The information which we have prepared is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

## **DISCLAIMER**

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.

Middlemarch Environmental Ltd accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared.

# **VALIDITY OF DATA**

The findings of this study are valid for a period of 24 months from the date of survey. If works have not commenced by this date, an updated site visit should be carried out by a suitably qualified ecologist to assess any changes in the habitats present on site, and to inform a review of the conclusions and recommendations made.

## **NON-TECHNICAL SUMMARY**

Middlemarch Environmental Ltd was commissioned by AWW Architects to carry out a Preliminary Ecological Appraisal at the site of a proposed development at 613-619 Southchurch Road, Southend. To fulfil this brief, an ecological desk study and a walkover survey (in accordance with Phase 1 Habitat Survey methodology) were undertaken.

The desk study exercise identified four European statutory sites within 5 km of the survey area, two UK statutory sites within 2 km, and no non-statutory sites within 1 km. The site is not located within 10 km of a statutory site designated for bats. The desk study also provided records of protected/notable species within a 1 km radius, including: bats, amphibians, reptiles, and birds.

The walkover survey was undertaken on the 25<sup>th</sup> of May 2021 by Sophie Moy (Senior Ecological Consultant). At the time of the survey, the site was dominated by areas of hardstanding utilised as a service road for deliveries, car parking, and access to the properties and garages. A series of 22 single-storey garages with pitched, slate-tiled roofs were located along the northern site boundary, while a two-storey, brick-built building with a pitched, slate-tiled roof dominated the southern section of the site. The rear garden of the two-storey building comprised of regularly mown amenity grassland with two semi-mature scattered sycamore trees, surrounded by wooden panelled fencing.

In order to ensure compliance with wildlife legislation and relevant planning policy, the following recommendations are made (see Chapter 7 for full details):

- Habitat Retention and Protection: The development proposals should be designed (where
  feasible) to allow for the retention of existing notable habitats such as semi-mature scattered trees. If
  retention is not possible, appropriate replacement planting should be incorporated into the soft
  landscape scheme in accordance with the ecological mitigation hierarchy. Only native and/or wildlife
  attracting species should be planted.
- **Habitats:** Biodiversity enhancement measures should be incorporated into the landscaping scheme of any proposed development to work towards delivering net gains for biodiversity.
- Roosting Bats: Recommendations made within the Preliminary Bat Roost Assessment Report RT-MME-155176-04 must be adhered to.
- **Lighting:** In accordance with best practice guidance relating to lighting and biodiversity (Miles et al, 2018; Gunnell et al, 2012), any new lighting should be carefully designed to minimise potential disturbance and fragmentation impacts on sensitive receptors, such as bat species.
- 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 120 mm must be covered at the end of each workday to prevent animals entering/becoming trapped.
- Nesting Birds: Vegetation and building clearance should be undertaken outside the nesting bird season. The nesting bird season is weather dependent but generally extends between March and September inclusive (peak period March-August).

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## 1. INTRODUCTION

#### 1.1 PROJECT BACKGROUND

In May 2021, AWW Architects commissioned Middlemarch Environmental Ltd to undertake a Preliminary Ecological Appraisal of the site of a proposed development at 613-619 Southchurch Road, Southend. This assessment is required to inform a planning application associated with the demolition of the garages and the construction of two end-of-terrace houses and two mews houses as well as an extension to the commercial premises.

In addition, Middlemarch Environmental Ltd has been commissioned to undertake the following assessments:

- Preliminary Arboricultural Assessment, Report RT-MME-155176-01;
- Arboricultural Impact Assessment, Report RT-MME-155176-02; and,
- Preliminary Bat Roost Assessment, Report RT-MME-155176-04.

To assess the existing ecological interest of the site an ecological desk study was carried out and a walkover survey was undertaken on the 25<sup>th</sup> of May 2021.

#### 1.2 SITE DESCRIPTION AND CONTEXT

The site under consideration is an irregularly shaped parcel of land located off Southchurch Road in Southend. It measures approximately 0.15 ha in size and is centred at OS grid reference TQ 89563 85993.

At the time of the survey, the site was dominated by areas of hardstanding utilised as a service road for deliveries, car parking, and access to the properties and garages. A series of 22 single-storey garages with pitched, slate-tiled roofs were located along the northern site boundary, while a two-storey, brick-built building with a pitched, slate-tiled roof dominated the southern section of the site. The rear garden of the two-storey building comprised of regularly mown amenity grassland with two semi-mature scattered sycamore trees, surrounded by wooden panelled fencing.

The wider landscape is dominated by residential and commercial development, with more semi-natural areas including arable fields to the north-east.

#### 1.3 DOCUMENTATION PROVIDED

The conclusions and recommendations made in this report are based on information provided by the client regarding the scope of the project. Documentation made available by the client is listed in Table 1.1.

Document Name / Drawing Number	Author
Site Location Plan / 0100	AWW Architects
Existing and Proposed Axonometric / 0400	AWW Architects
Design and Access Statement Southchurch Road	AWW Architects
Existing Site Plan / 0110	AWW Architects
Proposed Site Plan / 0111	AWW Architects

**Table 1.1: Documentation Provided by Client** 

#### 2. METHODOLOGIES

#### 2.1 DESK STUDY

An ecological desk study was undertaken to determine the presence of any designated nature conservation sites and protected species in proximity to 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;
- Essex Wildlife Trust; and,
- Essex Field Club.

The desk study included a search for:

- European statutory nature conservation sites in the UK (now referred to as the 'National Site Network') within a 5 km radius of the site (extended to 10 km for any statutory site designated for bats);
- UK statutory sites within a 2 km radius; and,
- Non-statutory sites and protected/notable species records within a 1 km radius.

The data collected from the consultees is discussed in Chapter 4. Selected raw data are provided in Appendix 1. In compliance with the terms and conditions relating to its commercial use, the full desk study data is not provided within this report.

The desk study also included a review of relevant local planning policy with regard to biodiversity and nature conservation (see Chapter 3).

#### 2.2 Phase 1 Habitat Survey

The walkover survey was conducted following the Phase 1 Habitat Survey 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.

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.

Data recorded during the field survey are discussed in Chapter 5.

## 3. LEGISLATION AND POLICY

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

#### 3.1 GENERAL BIODIVERSITY LEGISLATION AND POLICY

The Conservation of Habitats and Species Regulations 2017 (as amended) (the Habitats Regulations 2017) and the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations 2019 (the Habitats Regulations 2019)

The Habitats Regulations 2017 (as amended) transposed the land and marine aspects of the Habitats Directive (Council Directive 92/43/EEC) and certain elements of the Wild Birds Directive (Directive 2009/147/EC) (known as the Nature Directives) into English and Welsh law. Changes have been made to parts of the Habitats Regulations 2017 so that they operate effectively from 1 January 2021. The changes are made by the Habitats Regulations 2019, which transfer functions from the European Commission to the appropriate authorities in England and Wales.

All other processes or terms in the 2017 Regulations remain unchanged and existing guidance is still relevant.

The obligations of a competent authority in the 2017 Regulations for the protection of sites or species do not change. A competent authority is a public body, statutory undertaker, minister or department of government, or anyone holding public office.

The Habitats Regulations 2019 have created a 'National Site Network' on land and at sea, including both the inshore and offshore marine areas in the UK. The National Site Network includes:

- Existing Special Areas of Conservation (SACs), which are designated due to their importance to the habitats and species listed in Annexes I and II of the Habitats Directive;
- Existing Special Protection Areas (SPAs), which are designated due to their importance for wild birds in accordance with the Wild Birds Directive; and,
- New SACs and SPAs designated under these Regulations.

SACs and SPAs in the UK no longer form part of the European Union's Natura 2000 ecological network. Any references to Natura 2000 in the 2017 Regulations and in guidance now refers to the new National Site Network. However, guidance provided by Freeths (2020) recommends that SACs and SPAs can continue to be referred to as "European sites" / "European marine sites".

Designated Wetlands of International Importance (known as Ramsar sites) do not form part of the National Site Network. Many Ramsar sites overlap with SACs and SPAs and may be designated for the same or different species and habitats. All Ramsar sites remain protected in the same way as SACs and SPAs.

The 2019 Regulations establish management objectives for the National Site Network. The network objectives are to:

- Maintain or, where appropriate, restore habitats and species listed in Annexes I and II of the Habitats Directive to a favourable conservation status; and,
- Contribute to ensuring, in their area of distribution, the survival and reproduction of wild birds and securing compliance with the overarching aims of the Wild Birds Directive.

The appropriate authorities must also have regard to the:

- · Importance of protected sites;
- Coherence of the National Site Network; and,
- Threats of degradation or destruction (including deterioration and disturbance of protected features) on SPAs and SACs.

The network objectives contribute to the conservation of UK habitats and species that are also of pan-European importance, and to the achievement of their favourable conservation status within the UK.

#### 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 Habitat Regulations 2017 and the

Habitats Regulations 2019, 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.

# 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 superseded Section 74 of the CRoW Act 2000.

#### 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 Post-2010 Biodiversity Framework**

The UK Biodiversity Action Plan (BAP), published in 1994, was the UK Government's response to signing the Convention on Biological Diversity (CBD) at the 1992 Rio Earth Summit. The new UK Post-2010 Biodiversity Framework replaces the previous UK level BAP. The UK Post-2010 Biodiversity Framework covers the period 2011-2020 and forms the UK Government's response to the new strategic plan of the United Nations Convention on Biological Diversity (CBD), published in 2010 at the CBD meeting in Nagoya, Japan. This includes five internationally agreed strategic goals and supporting targets to be achieved by 2020. The five strategic goals agreed were:

- Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society;
- Reduce the direct pressures on biodiversity and promote sustainable use;
- To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity;
- Enhance the benefits to all from biodiversity and ecosystem services; and,
- Enhance implementation through participatory planning, knowledge management and capacity building.

The Framework recognises that most work which was previously carried out under the UK BAP is now focused on the four individual countries of the United Kingdom and Northern Ireland, and delivered through the countries' own strategies. Following the publication of the new Framework the UK BAP partnership no longer operates but many of the tools and resources originally developed under the UK BAP still remain of use and form the basis of much biodiversity work at country level. In England the focus is on delivering the outcomes set out in the Government's 'Biodiversity 2020: a Strategy for England's Wildlife and Ecosystem Services' (DEFRA, 2011). This sets out how the quality of our environment on land and at sea will be improved over the next ten years and follows on from policies contained in the Natural Environment White Paper.

# Species and Habitats of Material Consideration for Planning in England

Previous planning policy (and some supporting guidance which is still current, e.g. ODPM Circular 06/2005, now under revision), refers to UK BAP habitats and 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.

#### 3.2 NATIONAL PLANNING POLICY FRAMEWORK AND PRACTICE GUIDANCE

In February 2019, the National Planning Policy Framework (NPPF) was updated, replacing the previous framework published in 2012 and revised in 2018. 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 15, on conserving and enhancing the natural environment, sets out how the planning system should contribute to and enhance the natural and local environment by:

- protecting and enhancing existing sites of biodiversity value;
- minimising impacts on and providing net gains for biodiversity; and,
- · establishing coherent ecological networks.

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. With respect to development on land within or outside of a Site of Special Scientific Interest (SSSI) which is likely to have an adverse effect (either alone or incombination with other developments) would only be permitted where the benefits of the proposed development clearly outweigh the impacts on the SSSI itself, and the wider network of SSSIs. Development resulting in the loss of deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused unless there are wholly exceptional reasons for the development, and a suitable compensation strategy is provided.

Chapter 15 identifies that development whose primary objective is to conserve or enhance biodiversity should be supported and opportunities to incorporate biodiversity improvements in and around development should be encouraged, especially where this can secure measurable net gains for biodiversity.

Chapter 11, making effective use of the land, sets out how the planning system should promote use of land in meeting the need for homes and other uses, while safeguarding and improving the environment and ensuring safe and healthy living conditions. Substantial weight should be given to the value of using suitable brownfield land within settlements for homes and other identified needs. Opportunities for achieving net environmental gains, including new habitat creation, are encouraged.

In March 2014 the Department for Communities and Local Government released guidance to support the National Planning Policy Framework (NPPF), known as the National Planning Practice Guidance (NPPG). This has been produced to provide guidance for planners and communities which will help deliver high quality development and sustainable growth in England.

The guidance includes a section entitled 'Natural Environment: Biodiversity, geodiversity and ecosystems and green infrastructure', which was updated in July 2019. This document sets out information with respect to the following:

- the statutory basis for seeking to conserve and enhance biodiversity;
- the local planning authority's requirements for planning for biodiversity;
- what local ecological networks are and how to identify and map them;
- how plan-making bodies identify and safeguard Local Wildlife Sites, including Standard Criteria for Local Wildlife Sites;
- the sources of ecological evidence;
- the legal obligations on local planning authorities and developers regarding statutory designated sites and protected species;
- definition of green infrastructure;
- where biodiversity should be taken into account in preparing a planning application;
- how policy should be applied to avoid, mitigate or compensate for significant harm to biodiversity and how mitigation and compensation measures can be ensured;
- definitions of biodiversity net gain including information on how it can be achieved and assessed; and,

 the consideration of ancient woodlands and veteran trees in planning decisions and how potential impacts can be assessed.

The NPPG July 2019 issue also includes a section entitled 'Appropriate assessment: Guidance on the use of Habitats Regulations Assessment' which provides information in relation to Habitats Regulations Assessment processes, contents and approaches in light of case law. This guidance will be relevant to those projects and plans which have the potential to impact on European Sites and European Offshore Marine Sites identified under the Conservation of Habitats and Species Regulations 2017 (as amended).

## 3.3 LOCAL PLANNING POLICY - SOUTHEND-ON-SEA BOROUGH COUNCIL

https://www.southend.gov.uk/local-planning-framework

#### **Core Strategy**

Southend on Sea Borough Council adopted the Local Development Framework: Core Strategy Development Plan Document (CSDPD) in December 2007. This provides the vision and strategic objectives for the spatial strategy, key development principles, detailed core thematic policies and a monitoring and implementation framework for whole Borough of Southend on Sea until 2021.

The Borough Council has also adopted Supplementary Planning Documents (SPDs), which provide further guidance and advice in relation to delivery of the core strategy. The primary spatial strategy is supported by a set of additional key and core (thematic) policies. The policies relating to ecology are:

#### **Policy KP2: Development Principles**

Extract of policy text relevant to ecology (refer to core strategy document for full text):

All new development, including transport infrastructure, should contribute to economic, social, physical and environmental regeneration in a sustainable way throughout the Thames Gateway Area, and to the regeneration of Southend's primary role within Thames Gateway as a cultural and intellectual hub and a higher education centre of excellence. This must be achieved in ways which: "respect, conserve and enhance and where necessary adequately mitigate effects on the natural and historic environment, including the Borough's biodiversity and green space resources; ensure that European and international sites for nature conservation are not adversely affected and contribute positively towards the 'Green Grid' in Southend'.

#### Policy CP4: The Environment and Urban Renaissance

Development proposals will be expected to contribute to the creation of a high quality, sustainable urban environment which enhances and complements the natural and built assets of Southend. This will be achieved by:

- promoting sustainable development of the highest quality and encouraging innovation and excellence in design to create places of distinction and a sense of place;
- maximising the use of previously developed land, whilst recognising potential biodiversity value and promoting good, well-designed, quality mixed use developments;
- ensuring design solutions that maximise the use of sustainable and renewable resources in the construction of development and resource and energy conservation (including water) in developments;
- providing for quality in the public realm through the use of imaginative and innovative design, sustainable and quality materials and landscaping and imaginative use of public art;
- maintaining and enhancing the amenities, appeal and character of residential areas, securing good relationships with existing development, and respecting the scale and nature of that development;
- creating safe, permeable and accessible development and spaces that encourage walking and cycling within 'Environmental Rooms';
- safeguarding and enhancing the historic environment, heritage and archaeological assets, including Listed Buildings, Conservation Areas and Ancient Monuments;

- protecting and enhancing the town's parks, gardens and other urban open spaces, including all open areas whose townscape and amenity value is important to the surrounding area, and the biodiversity of the area;
- safeguarding, protecting and enhancing nature and conservation sites of international, national and local importance;
- creating and maintaining a 'Green Grid' of high quality, linked and publicly accessible open spaces across the town which contribute to and help develop the Thames Gateway Green Grid;
- maintaining the function and open character of a sustainable Green Belt;
- providing for the effective management of land uses on the urban fringe, including landscape enhancement in respect of any development;
- protecting natural resources from inappropriate development;
- preventing, reducing or remedying all forms of pollution including soil, water, noise and other forms of airborne pollution.

#### **Development Management Document**

The 'Development Management' Development Plan Document, adopted July 2015, forms part of the Southern on Sea Local Planning Framework. It sets out policies for positively managing development and will be used to assess and determine planning applications. The policy in relation to ecology is:

#### Policy DM6 – The Seafront

Extract of policy text relevant to ecology (refer to core strategy document for full text):

All development within the Seafront Area will incorporate measures which will:

- Limit any adverse impacts and where possible enhance the biodiversity interests of the local nature reserves and coastal and marine environment; and,
- Protect the valuable natural amenity areas of International, European and National importance.

#### 4. **DESK STUDY RESULTS**

#### 4.1 INTRODUCTION

The data search was carried out in May 2021 by Essex Wildlife Trust and Essex Field Club. All relevant ecological data provided by the consultees was reviewed and the results from these investigations are summarised in Sections 4.2 to 4.4. Selected data are provided in Appendix 1.

#### 4.2 **NATURE CONSERVATION SITES**

Statutory and non-statutory nature conservation sites located in proximity to the survey area are summarised in Table 4.1.

Site Name	Designation	Proximity to Survey Area	Description				
European Statutory Sites							
Benfleet and Southend Marshes	RAMSAR, SPA, SSSI	1,120 m south-west	Benfleet and Southend Marshes comprise an extensive series of salt marshes, mudflats, scrub, and grassland, which support diverse flora and fauna. The south-facing slopes of the downs, composed of London Clay capped by sand, represent the line of former river cliffs with several re-entrant valleys. At their foot lies reclaimed marshland, with its associated dyke system, based on alluvium. Outside the sea walls there are extensive salt marshes and mudflats, on which wintering wildfowl and waders reach both nationally and internationally important numbers. Nationally uncommon plants occur in all of the habitats and parts of the area are of importance for scarce invertebrates.				
Crouch and Roach Estuaries (Mid-Essex Coast Phase 3)	RAMSAR, SPA	3,940 m north	This site includes the tidal estuaries of the Crouch and Roach Rivers, an extensive and diverse saltmarsh, and a narrow strip of tidal mud. The dark-bellied Brent goose <i>Branta bernicla bernicla</i> occurs in internationally important numbers, while three other species of wader and wildfowl occur in nationally important numbers. The site also supports a diversity of aquatic and terrestrial invertebrates and an assemblage of nationally scarce plants.				
Essex Estuaries	SAC	3,940 m north	A large estuarine site in south-east England, comprising of a typical, undeveloped, coastal plain estuarine system with associated open coast mudflats and sandbanks. The site comprises the major estuaries of the Colne, Blackwater, Crouch, and Roach rivers and is important as an extensive area of contiguous estuarine habitat.				
Foulness (Mid-Essex Coast Phase 5)	RAMSAR, SPA	4,010 m south-east	Part of an open coast estuarine system comprising grazing marsh, saltmarsh, intertidal mud, and sandflats. The site supports nationally rare plants, as well as nationally and internationally important populations of various species of breeding, migratory, and wintering waterbirds.				
UK Statutory Sites							
Southend-on-Sea Foreshore	LNR	1,430 m south-west	Southend's foreshore at the mouth of the Thames Estuary supports an abundance of habitats and wildlife and is internationally important for migrating birds.				

RAMSAR: Site listed on The Convention on Wetlands of International Importance (Ramsar Convention)

SPA: Special Protection Area SAC: Special Area of Conservation SSSI: Site of Special Scientific Interest LNR: Locall Nature Reserve

**Table 4.1: Summary of Nature Conservation Sites** 

The survey area is also located within a SSSI Impact Risk Zone for Benfleet and Southend Marshes (RAMSAR, SPA, SSSI), which is located 1.12 km south-west and is further detailed in Table 4.1.

#### 4.3 PROTECTED / NOTABLE SPECIES

Table 4.2 and the following text provide 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?	Legislation / Conservation Status
Mammals - bats				•	
Common pipistrelle Pipistrellus pipistrellus	2	2015	360 m south	-	ECH 4, WCA 5, WCA 6
Soprano pipistrelle Pipistrellus pygmaeus	2	2011	360 m south	✓	ECH 4, WCA 5, WCA 6
Amphibians					
Common frog Rana temporaria	10	2012	210 m south- east	-	WCA 5 S9(5)
Common toad Bufo bufo	5	2012	400 m east	✓	WCA 5 S9(5)
Reptiles					
Slow worm Anguis fragilis	8	2020	100 m north	✓	WCA 5 S9(1), WCA 5 S9(5)
Common lizard Zootoca vivipara	1	2005	590 m east	✓	WCA 5 S9(1), WCA 5 S9(5)
Birds					
Bewick's swan Cygnus columbianus	1	2016	Potentially within 1 km*	✓	WCA1i
Black-tailed godwit Limosa limosa	3	2015	Potentially within 1 km*	✓	WCA1i
Common scoter Melanitta nigra	5	2019	Potentially within 1 km*	✓	WCA1i
Eurasian hobby Falco subbuteo	5	2015	Potentially within 1 km*	-	WCA1i
Fieldfare Turdus pilaris	8	2018	Potentially within 1 km*		WCA1i

#### Key:

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.

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 4.2: Summary of Protected/Notable Species Records Within 1 km of Survey Area

#### **Birds**

Records of an additional 14 bird species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) potentially within a 1 km radius of the survey area were provided by the desk study.

<sup>\*:</sup> Grid reference provided was four figures only.

The desk study provided records of seven species of bird listed as Species of Principal Importance potentially within a 1 km radius of the survey area, including skylark *Alauda arvensis*, reed bunting *Emberiza schoeniclus*, herring gull *Larus argentatus*, starling *Sturnus vulgaris*, and song thrush *Turdus philomelos*.

The desk study also provided records of eight bird species listed on the RSPB Red List potentially within 1 km, including ringed plover *Charadrius hiaticula*, nightingale *Luscinia megarhynchos*, curlew *Numenius arquata*, shag *Phalacrocorax aristotelis*, and red-necked grebe *Podiceps grisegena*, as well as records of 29 species on the RPSB Amber List, including razorbill *Alca torda*, teal *Anas crecca*, mallard *Anas platyrhynchos*, turnstone *Arenaria interpres*, and short-eared owl *Asio flammeus*.

## 4.4 INVASIVE SPECIES

Table 4.3 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
Floating pennywort Hydrocotyle ranunculoides	2	2015	Potentially within 1 km*	WCA 9
Japanese rose Rosa rugosa	4	2014	Potentially within 1 km*	WCA 9

#### Key:

Table 4.3: Summary of Invasive Species Records Within 1 km of Survey Area

<sup>\*:</sup> Grid reference provided was four references only.

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

#### 5. PHASE 1 HABITAT SURVEY

#### 5.1 INTRODUCTION

The results of the Phase 1 Habitat Survey are presented in the following sections. An annotated Phase 1 Habitat Survey Drawing (Drawing C155176-03-01) is provided in Chapter 8. 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. Photographs taken during the field survey are presented in Chapter 9.

The survey was carried out on the 25<sup>th</sup> of May 2021 by Sophie Moy (Senior Ecological Consultant). Table 5.1 details the weather conditions at the time of the survey.

Parameter	Condition
Temperature (°C)	12
Cloud (%)	100
Wind (Beaufort)	F1
Precipitation	Light rain

**Table 5.1: Weather Conditions During Field Survey** 

#### 5.2 SURVEY CONSTRAINTS AND LIMITATIONS

No significant constraints or limitations were experienced during the survey.

#### 5.3 HABITATS

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

- Amenity grassland;
- Building;
- Fence;
- Hardstanding; and,
- Scattered trees.

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

#### Amenity grassland

A small area of amenity grassland was located within the rear garden of the two-storey brick-built building (Plate 9.1). Species included predominantly perennial ryegrass *Lolium perenne* with frequent clover *Trifolium* sp., dandelion *Taraxacum officinale*, and occasional sun spurge *Euphorbia helioscopia*.

## **Building**

A series of 22 single-storey garages with pitched, slate-tiled roofs were located along the northern site boundary (Plate 9.2). These were being utilised for storage at the time of the survey. A two-storey, brick-built building with a pitched, slate-tiled roof dominated the southern section of the site. For further details on the buildings on site, please refer to the Preliminary Bat Roost Assessment Report RT-MME-155176-04.

#### Fence

Wooden panelled fencing surrounded the area of amenity grassland within the rear garden of the building adjacent to the southern site boundary. This was generally in good condition, with some ivy *Hedera helix* growth noted along the western edge (Target Note 1) [Plate 9.3].

#### Hardstanding

The site was dominated by hardstanding which was utilised as a service road for deliveries, car parking, and access to the properties and garages. Some colonising vegetation was noted growing within the cracks (Plate 9.4), including sow thistle *Sonchus* sp., wall barley *Hordeum murinum*, annual mercury *Mercurialis annua*, sycamore *Acer pseudoplatanus* saplings, chickweed *Stellaria media*, dandelion, Spanish bluebell *Hyacinthoides hispanica*, shepherd's purse *Capsella bursa-pastoris*, common nettle *Urtica dioica*, herb Robert *Geranium robertianum*, hedge mustard *Sisymbrium officinale*, and sun spurge.

#### **Scattered trees**

Two semi-mature sycamore trees were located within the amenity grassland garden (Plate 9.1). Both of the sycamore trees were in good condition at the time of the survey.

## 5.4 FAUNA

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

## **Birds**

House sparrow Passer domesticus was observed within the rear garden during the survey.

# 5.5 INVASIVE PLANT SPECIES

No invasive plant species were recorded on site during the survey.

## 6. DISCUSSIONS AND CONCLUSIONS

#### 6.1 SUMMARY OF PROPOSALS

It is understood that the proposed development will involve the demolition of the 22 garages along the northern boundary and the construction of two end-of-terrace houses and two mews houses, as well as an extension to the existing commercial premises to the south.

#### 6.2 NATURE CONSERVATION SITES

The desk study exercise identified four European statutory sites within 5 km of the survey area, two UK statutory sites within 2 km, and no non-statutory sites within 1 km. The site is not located within 10 km of a statutory site designated for bats. The significance of these sites to the proposed development is discussed below.

#### **European Statutory Sites**

Benfleet and Southend Marshes (RAMSAR, SPA, SSSI) is located 1,120 m south-west of the proposed development site. The survey area also falls within a SSSI Impact Risk Zone. It is understood that the proposed development does not fall within any of the 'Risk Categories', as it will involve the construction of less than 50 residential units (see Appendix 1). Therefore, no adverse impacts upon this nature conservation site are anticipated as a result of the proposed development.

A further three European statutory sites are located in excess of 3,930 m of the survey area. Given the distance separating these sites from the survey area and the built-up nature of the intervening habitats, no adverse impacts upon these nature conservation sites are anticipated.

#### **UK Statutory Sites**

Southend-on-Sea Foreshore (LNR) is located 1,430 m south-west. Given the distance separating this site from the survey area and the built-up nature of the intervening habitats, no adverse impacts upon this LNR are anticipated as a result of the proposed development.

#### 6.3 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. Those habitats which are considered to be of intrinsic importance and have the potential to be impacted by the site proposals are highlighted as notable considerations.

A discussion of the implications of the site proposals with regard to the habitats present on site is provided in the text below. A separate discussion of the value of the habitats on site to protected or notable species is provided in Section 6.4.

#### **Scattered trees**

The two semi-mature trees within the survey area cannot be replaced in the short to medium term and hold intrinsic value to the site. Thus, semi-mature trees on site should, where possible, be retained as part of the proposed development plans. In the absence of appropriate protection measures there is the potential for works associated with the proposed development to harm (e.g. root compaction due to use/storage of heavy vehicles and machinery) any trees which are retained as part of the plans. A recommendation has therefore been made in Section 7.2 with regard to tree retention and protection measures.

#### Amenity grassland, building, fence, and hardstanding

These habitats are not deemed to be a notable consideration as they are not Habitats of Principal Importance, nor are they listed as priority habitats on the Local BAP. In addition, they are well represented locally, have low species diversity, or can be easily recreated post-development. The potential for these habitats to support protected/notable species is discussed in Section 6.4.

Habitats considered to be of relevance to the proposed development are summarised in Table 6.1.

Habitat Type	Habitat of Principal Importance?	Local BAP Habitat?	Summary of Potential Impacts
Scattered trees	-	-	Direct loss, accidental damage, root damage/compaction etc.

Table 6.1: Summary of Potential Impacts on Notable Habitats

#### 6.4 PROTECTED/NOTABLE SPECIES

The following paragraphs consider the likely impact of the site proposals on protected or notable species. This is based on those species highlighted in the desk study exercise (Chapter 4) and other species for which potentially suitable habitat occurs within or adjacent to the survey area.

#### **Mammals**

#### **Bats**

The desk study provided four records of two species of bat within a 1 km radius of the survey area, the closest of which was located 360 m south. The two sycamore trees on site were in good condition and did not contain any suitable features for roosting bats; however, both buildings within the site were identified as having high potential to support roosting bats. The site offers limited foraging habitat but has connectivity to some suitable habitat within the wider landscape including adjacent residential gardens.

The development of the site has the potential to impact suitable roosting habitat for bats. Impacts include direct harm/injury, habitat loss, and disturbance through increases in lighting. Bats are, therefore, a notable consideration in relation to the proposed development and the reader is referred to the Preliminary Bat Roost Report RT-MME-155176-04.

#### Badger

The desk study provided no records of badger *Meles meles* within a 1 km radius of the survey area and no evidence of badger (e.g. setts or latrines) was recorded during the field survey.

The site is considered to be unsuitable for badger as it is dominated by the built environment and has limited connectivity to suitable habitat within the wider landscape as it is located within a built-up, residential area. Furthermore, there are no corridors of vegetation which may allow commuting badger to access the site in close proximity to the study area. Therefore, it is considered unlikely that badger would be present on site, and they are not a notable consideration in relation to the proposed development.

#### Hedgehog

The desk study provided no records of hedgehog within a 1 km radius of the survey area. The amenity grassland offers some potential foraging habitat for hedgehog with some albeit very limited connectivity to adjacent residential gardens. Therefore, there is a possibility that hedgehog utilise the site in some capacity. To prevent any harm to this species during the construction phase of the proposed development, a recommendation regarding terrestrial mammals has been made within Section 7.3.

# **Amphibians**

The desk study provided 15 records of common amphibians within a 1 km radius of the survey area, the closest of which was located 210 m south-east. No records of great crested newt *Triturus cristatus* were provided. The site offers no suitable terrestrial or breeding habitat for amphibians as it is dominated by the built environment and the area of amenity grassland is regularly managed. Reference to Ordnance Survey mapped data and aerial imagery indicates that there is one pond located 440 m south-west, which could offer potential breeding habitat; however, this is isolated from the site by busy roads which would act as a barrier to dispersal. Given the lack of suitable habitat on site and limited connectivity to suitable habitat within the wider landscape, it is considered unlikely that great crested newts and/or common amphibians would be present within the site. Amphibians are, therefore, not a notable consideration in relation to the proposed development.

#### Reptiles

The desk study provided nine records of reptiles within a 1 km radius of the survey area, the closest of which was located 100 m north. The site offers no suitable habitat for reptiles as it is dominated by the built environment and the area of amenity grassland is regularly managed. In addition, the site has limited connectivity to suitable habitat within the wider landscape as it is bordered by busy roads. Therefore, it is

considered unlikely that reptiles would be present within the site, and they are not a notable consideration in relation to the proposed development.

#### **Birds**

The desk study provided records of 19 species of bird listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) potentially within a 1 km radius of the survey area, as well as records of seven Species of Principal Importance. It is considered unlikely that Schedule 1 species would be present on site as it contains limited habitat for birds. Nevertheless, the two trees within the rear garden provide suitable nesting habitat for more common bird species.

The development of the site has the potential to cause direct harm or injury to breeding birds, if timed to occur within the nesting bird season. A recommendation regarding the appropriate timing of site clearance activities has been made within Section 7.3. Given the extent of suitable habitat within the wider landscape, no long-term impacts on birds are anticipated. Nevertheless, as some losses will occur, a recommendation regarding general habitat enhancement has been provided within Section 7.2.

#### **Invertebrates**

The desk study provided no records of protected/notable invertebrates within a 1 km radius of the survey area. The amenity grassland and trees may offer some habitat for common invertebrate species. Although any invertebrate species present within the site may be temporarily displaced during the construction phase of the proposed development, providing new habitats are created as part of the development, no long-term impact on invertebrates is anticipated. A recommendation regarding general habitat enhancement, which would increase the value of the site for invertebrates, has been provided within Section 7.2.

#### **Other Species**

The following protected species are not considered to be material considerations due to the lack of desk study records and absence of suitable habitats within the development site and its surroundings: dormouse *Muscardinus avellanarius*, harvest mouse *Micromys minutus*, pine marten *Martes martes*, polecat *Mustela putorius*, brown hare *Lepus europaeus*, and white-clawed crayfish *Austropotamobius pallipes*.

#### **Summary**

Species considered to be of relevance to the proposed development are summarised in Table 6.2.

Species / Species Group	Species of Principal Importance?	Summary of Potential Impacts	
Bats	#	Habitat loss, direct harm/injury, disturbance through increases in lighting.	
Hedgehog	✓	Direct harm/injury.	
Birds	#	Direct harm/injury.	
#: Dependent on species.			

Table 6.2: Summary of Potential Impacts on Notable Species

# 6.5 INVASIVE PLANT SPECIES

The desk study provided records of two invasive plant species potentially within a 1 km radius of the survey area. No invasive plant species were recorded on site during the survey and, therefore, they are not a notable consideration in relation to the proposed development.

#### 7. RECOMMENDATIONS

All recommendations provided in this section are based on Middlemarch Environmental Ltd's current understanding of the site proposals, correct at the time the report was compiled. Should the proposals alter, the conclusions and recommendations made in the report should be reviewed to ensure that they remain appropriate.

The ecological mitigation hierarchy should be applied when considering development which may have a significant effect on biodiversity. The ecological mitigation hierarchy, as set out in the National Planning Policy Framework (NPPF), and the National Planning Practice Guidance (NPPG) should follow these principles:

- **Avoidance** development should be designed to avoid significant harm to valuable wildlife habitats and species.
- **Mitigation** where significant harm cannot be wholly or partially avoided, it should be minimised by design or through the use of effective mitigation measures.
- **Compensation** where, despite whatever mitigation would be effective, there would still be significant residual harm, as a last resort, compensation should be used to provide an equivalent value of biodiversity.

#### 7.1 NATURE CONSERVATION SITES

There are no recommendations made regarding nature conservation sites.

#### 7.2 HABITATS

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

- R1 Habitat Retention and Protection: The development proposals should be designed (where feasible) to allow for the retention of existing notable habitats such as semi-mature scattered trees. Protection measures comprise:
  - O <u>Trees:</u> Any trees/hedgerows on or overhanging the site, which are retained 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.

If retention is not possible, appropriate replacement planting should be incorporated into the soft landscape scheme in accordance with the ecological mitigation hierarchy. Only native and/or wildlife attracting species should be planted.

- **R2 Biodiversity Enhancement:** In accordance with the provision of Chapter 15 of the National Planning Policy Framework (Conserving and Enhancing the Natural Environment) and Local Planning Policy (Policy KP2: Development Principles), biodiversity enhancement measures should be incorporated into the landscaping scheme of any proposed development to work towards delivering net gains for biodiversity. This could involve, for example:
  - Planting of habitats which will be of value to wildlife, such as:
    - o native seed/fruit bearing species to provide foraging habitat for mammals and birds;
    - o 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 small heath butterfly;
    - o 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.

## 7.3 PROTECTED / NOTABLE SPECIES

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

- **R3** Roosting Bats: Recommendations made within the Preliminary Bat Roost Assessment Report RT-MME-155176-04 must be adhered to.
- **R4 Lighting:** In accordance with best practice guidance relating to lighting and biodiversity (Miles et al, 2018; Gunnell et al, 2012), any new lighting should be carefully designed to minimise potential disturbance and fragmentation impacts on sensitive receptors, such as bat species. Examples of good practice include:
  - Avoiding the installation of new lighting in proximity to key ecological features, such as the northern site boundary which abuts residential gardens with mature trees.
  - Using modern LED fittings rather than metal halide or sodium fittings, as modern LEDs emit negligible UV radiation.
  - The use of directional lighting to reduce light spill, e.g. by installing bespoke fittings or using hoods or shields. For example, downlighting can be used to illuminate features such as footpaths whilst reducing the horizontal and vertical spill of light.
  - Where the use of bollard lighting is proposed, columns should be designed to reduce horizontal light spill.
  - Implementing controls to ensure lighting is only active when needed, e.g. the use of timers or motion sensors.
  - Use of floor surface materials with low reflective quality. This will ensure that bats using the site and surrounding area are not affected by reflected illumination.
  - For internal lights, recessed light fittings cause significantly less glare than pendant type fittings. The use of low-glare glass may also be appropriate where internal lighting has the potential to influence sensitive ecological receptors.
- **R5 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 120 mm must be covered at the end of each workday to prevent animals entering/becoming trapped.
- **Nesting Birds:** Vegetation and building clearance should be undertaken outside the nesting bird season. The nesting bird season is weather dependent but generally extends between March and September inclusive (peak period March-August). If this is not possible then any vegetation or buildings 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 should be delayed until the young have fledged and the nest has been abandoned naturally, for example via the implementation of an appropriate buffer zone (species dependent) around the nest in which no disturbance is permitted until the nest is no longer in use.

#### 7.4 INVASIVE PLANT SPECIES

There are no recommendations made regarding invasive plant species.

# 8. DRAWINGS

Drawing C155176-03-01 - Phase 1 Habitat Map



# 9. PHOTOGRAPHS



Plate 9.1: Amenity grassland with scattered trees, surrounded by wooden fencing.



Plate 9.2: Garages along northern boundary.



Plate 9.3: Ivy growth on rear garden fence.



Plate 9.4: Hardstanding.

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# **APPENDICES**

APPENDIX 1: Summary of Statutory Nature Conservation Sites

APPENDIX 2: Overview of Relevant Species Specific Legislation

# **APPENDIX 1**

Summary of Statutory Nature Conservation Sites

#### **UK Statutory Site Search**

Site Check Report: Report generated on Mon Jun 07 2021

Centroid Grid Ref: TQ89568598

The following features have been found in your search area:

#### Local Nature Reserves (England)

Reference 1009278 Name

SOUTHEND ON SEA FORESHORE

Hectares 1083.92 Hyperlink

https://designatedsites.naturalengland.org.uk/SiteLNRDetail.aspx?SiteCode=L1009278

#### Sites of Special Scientific Interest (England)

Name

Benfleet and Southend Marshes SSSI

Reference 1001679

Natural England Contact

**NEIL FULLER** 

Natural England Phone Number

0845 600 3078 Hectares

2373.69

Citation

1004414

Hyperlink

http://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s1004414

#### Ancient Woodland (England)

No Features found

#### National Nature Reserves (England)

No Features found

### Marine Conservation Zones (England)

No Features found

SSSI Impact Risk Zones - to assess planning applications for likely impacts on SSSIs/SACs/SPAs & Ramsar sites (England)

- 1. DOES PLANNING PROPOSAL FALL INTO ONE OR MORE OF THE CATEGORIES BELOW?
- 2. IF YES, CHECK THE CORRESPONDING DESCRIPTION(S) BELOW. LPA SHOULD CONSULT NATURAL ENGLAND ON LIKELY RISKS FROM THE FOLLOWING:

All Planning Applications

Infrastructure

Pipelines, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals.

Wind & Solar Energy

Solar schemes with footprint > 0.5ha, all wind turbines.

Minerals, Oil & Gas

Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP),

extensions, variations to conditions etc. Oil & gas exploration/extraction.

Rural Non Residential

Large non residential developments outside existing settlements/urban areas where footprint exceeds 1ha.

Residential

Residential development of 50 units or more.

Rural Residential

Any residential development of 50 or more houses outside existing settlements/urban areas.

Air Pollution

Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons > 750m² & manure stores > 3500t).

Combustion

General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.

Waste

Landfill. Incl: inert landfill, non-hazardous landfill, hazardous landfill.

Composting

Discharges

Any discharge of water or liquid waste of more than 5m<sup>3</sup>/day to ground (ie to seep away) or to surface water, such as a beck or stream.

Water Supply

Large infrastructure such as warehousing / industry where total net additional gross internal floorspace following development is 1,000m<sup>2</sup> or more.

Notes 1

For new residential development in this area, consideration is required in terms of the emerging Essex Coast Recreational disturbance Avoidance and Mitigation Strategy (RAMS). Contact the Local Planning Authority for further advice.

Notes 2

GUIDANCE - How to use the Impact Risk Zones

/Metadata for magic/SSSI IRZ User Guidance MAGIC.pdf

#### **European Statutory Site Search**

#### Ramsar Sites (England)

Name

BENFLEET AND SOUTHEND MARSHES

Reference

UK11006

Hectares

2283.97

Name

FOULNESS (MID-ESSEX COAST PHASE 5)

Reference

UK11026

Hectares

10942.13

Name

CROUCH & ROACH ESTUARIES (MID-ESSEX COAST PHASE 3)

Reference

UK11058

Hectares

1847.87

### Special Areas of Conservation (England)

Name

**ESSEX ESTUARIES** 

Reference

UK0013690

Hectares

46111.43

Hyperlink

http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?eucode=UK0013690

# Special Protection Areas (England)

Name

CROUCH & ROACH ESTUARIES (MID-ESSEX COAST PHASE 3)

Reference

UK9009244

Hectares

1847.87 Name

BENFLEET AND SOUTHEND MARSHES

Reference

UK9009171

Hectares

2283.97

Name

FOULNESS (MID-ESSEX COAST PHASE 5)

Reference

UK9009246

Hectares

10942 13

#### Proposed Ramsar Sites (England)

No Features found

# Possible Special Areas of Conservation (England)

No Features found

#### Potential Special Protection Areas (England)

No Features found

## **APPENDIX 2**

Overview of Relevant Species Specific Legislation

#### **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 2017 (Habitats Regulations 2017). 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 2017, 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 2017 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* 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.

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*.

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

## 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.

#### **Birds**

The Conservation of Habitats and Species Regulations 2017 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;

<sup>\*</sup>Reckless offences were added by the Countryside and Rights of Way (CRoW) Act 2000.

- 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.

# **APPENDIX 3**

Desk study data provided by Essex Field Club