Old Ashford Road, Lenham, Kent

Preliminary Ecological Appraisal

29th April 2015 / Ref No 2014/09/01

Client: EuroCanterbury

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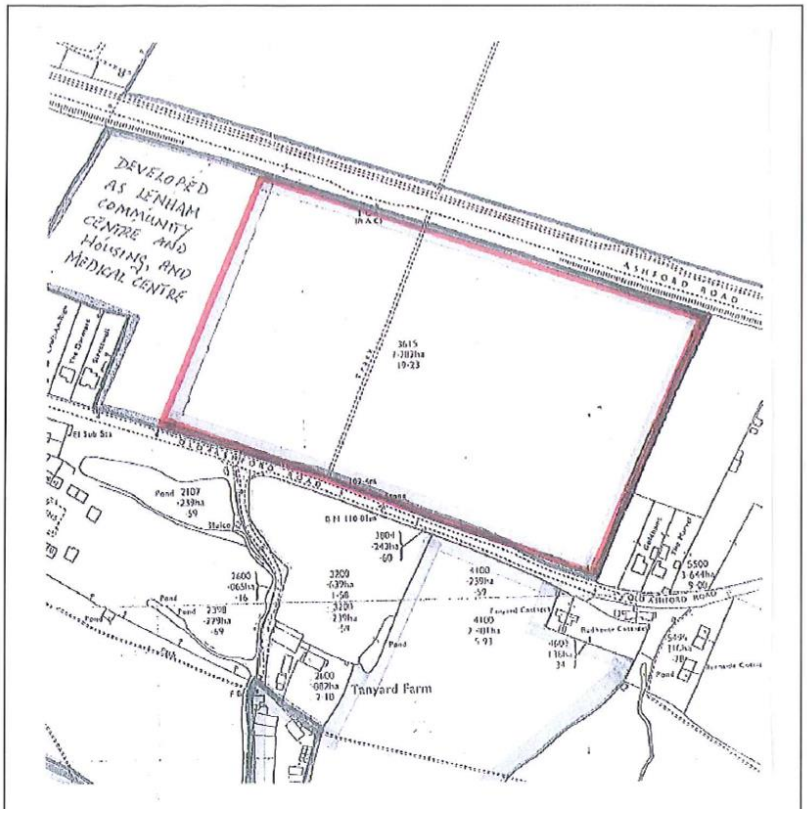
Contents

1 Introduction

1.1 Background to the Scheme

KB Ecology Ltd has been commissioned to undertake a baseline ecological survey and a preliminary ecological appraisal with regards to a proposed development along Old Ashford Road, Lenham Kent, in support of a planning application for the erection of a number of new dwelling houses.

The extent of site to be surveyed is shown on the map below, as sent by the client:



1.2 Survey Location/Area

The site is located at approximately TQ 904 522. The location of the site is shown on Figure 1 and Figure 2.

1.3 Survey Objectives

The purpose of this survey is to provide a scoping assessment and to assist in demonstrating compliance with wildlife legislation and planning policy objectives.

The key objectives are as follows:

- Identify all relevant statutory and non-statutory designated sites and features of ecological significance within the site and its surroundings.

- Assess the potential for the presence of protected species and species of principal conservation importance, important habitats or other biodiversity features within the site and its surroundings.
- Provide recommendations for further surveys where assessed as necessary and suggest potential enhancements.
- Present the likely significance of ecological impacts on the proposed development.
- Provide an early indication of potential ecological mitigation and compensation requirements necessary as part of any development proposals.

A summary of wildlife legislation and policy has been included in Appendix A.

1.4 Limitations

This report aims to provide general advice on ecological constraints associated with any development of the site and includes recommendations for further survey; it is not intended that this report should be submitted with a planning application for development of the site, *unless supported by the results of further surveys and a detailed assessment of the effects of the proposed development.*

This report has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct and the opinions expressed are true and professional bona fide opinions. It records the potential for flora and fauna evident on the days of the site visits. It does not record any flora or fauna that may appear at other times of the year and, as such, were not evident at the time of visit.

The findings of this report represent the professional opinion of a qualified ecologist and do not constitute professional legal advice. The client may wish to seek professional legal interpretation of the relevant wildlife legislation cited in this document.

2 Methodology

2.1 Desk Study

Web-based resources were consulted to identify designated nature conservation sites within 1km of the site and habitats of potentially high ecological importance and sensitivity within 500m of the site (e.g. ancient woodlands, ponds).

A data search was carried out with the Kent and Medway Biological Record Centre KMBRC[1] (ENQ/15/152).

2.2 Scoping Survey

The site and its immediate surroundings were considered in terms of habitats, protected species and species of principal conservation importance during a walkover survey undertaken on 13th April 2015 by Katia Bresso CEnv MCIEEM, a qualified professional consultant ecologist with over 10 years of experience[2], licensed bat surveyor (Class Survey Licence Registration Number CLS01228, level 2), licensed dormouse surveyor and licensed great crested newt surveyor (Class Survey Licences Registration Number 2014-6520-CLS-CLS and 2015-8717-CLS-CLS). Evidence of the use of the site by species was recorded (i.e. field signs).

The habitat survey was undertaken in general accordance with Phase 1 Habitat Survey (JNCC 2010), i.e. within the survey area every parcel of land is classified, recorded and mapped in accordance with a list of ninety specified habitat types using standard colour codes to allow rapid visual assessment of the extent and distribution of different habitat types.

The survey and report aim at following the guidance and recommendations in the 'British Standard Biodiversity Code of Practice for Planning and Development (BS 42020: 2013)'.

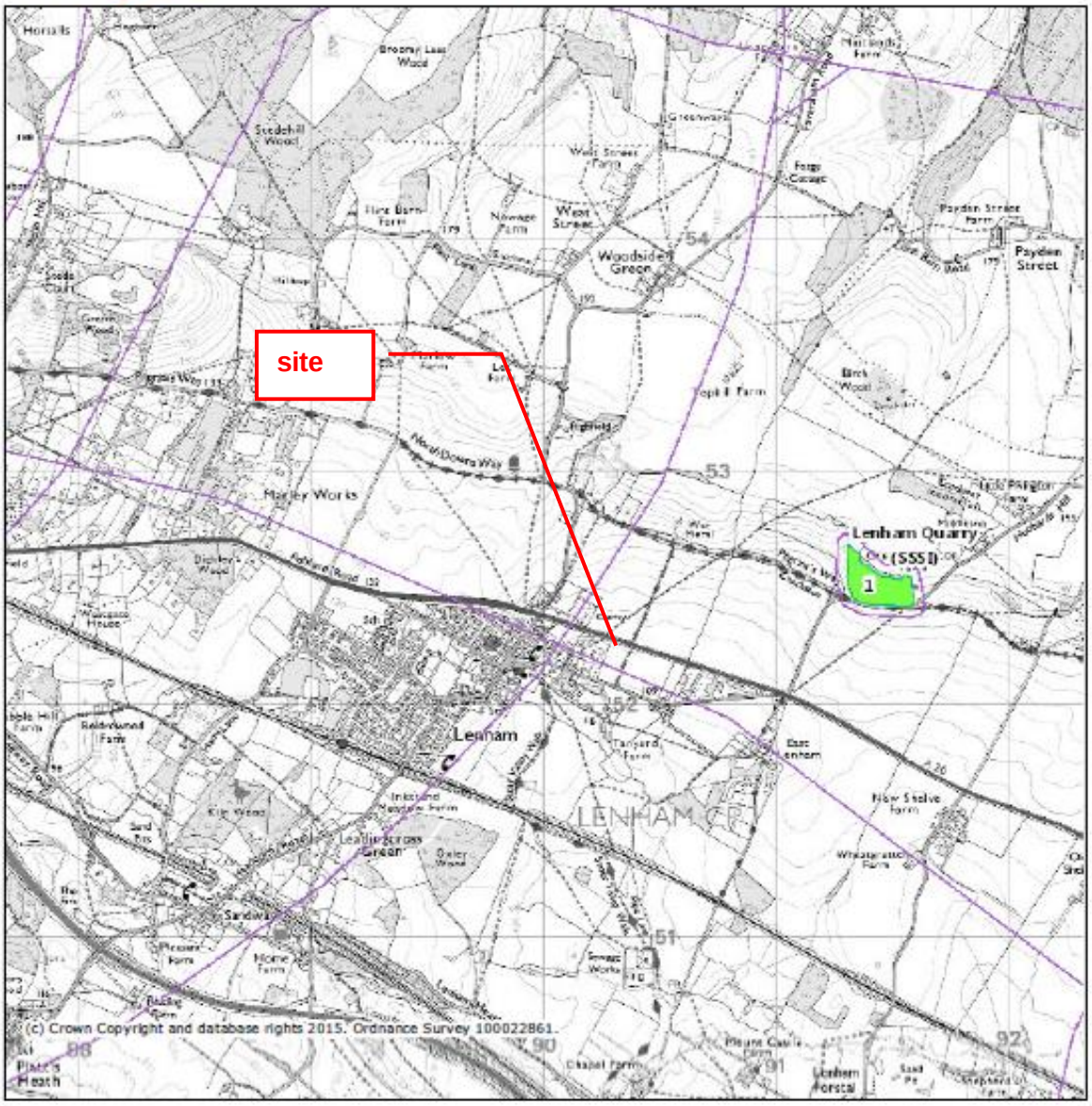
All trees were also checked for potential for roosting bats (from the ground only, using binoculars).

[1] Please note that absence of records should not be taken as confirmation that a species is absent from the search area.

[2] Katia Bresso is a Suitably Qualified Ecologist with regards to Code for Sustainable Homes assessment and BREEAM

MAGIC

Figure 1



Legend

- Limestone Pavement Orders (England)
- Local Nature Reserves (England)
- Moorland Line (England)
- National Nature Reserves (England)
- National Nature Reserves (Scotland)
- National Nature Reserves (Wales)
- National Parks (England)

Projection = OSGB36
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ymin = 149900
xmax = 594200
ymax = 155400

Map produced by MAGIC on 27 April, 2015.
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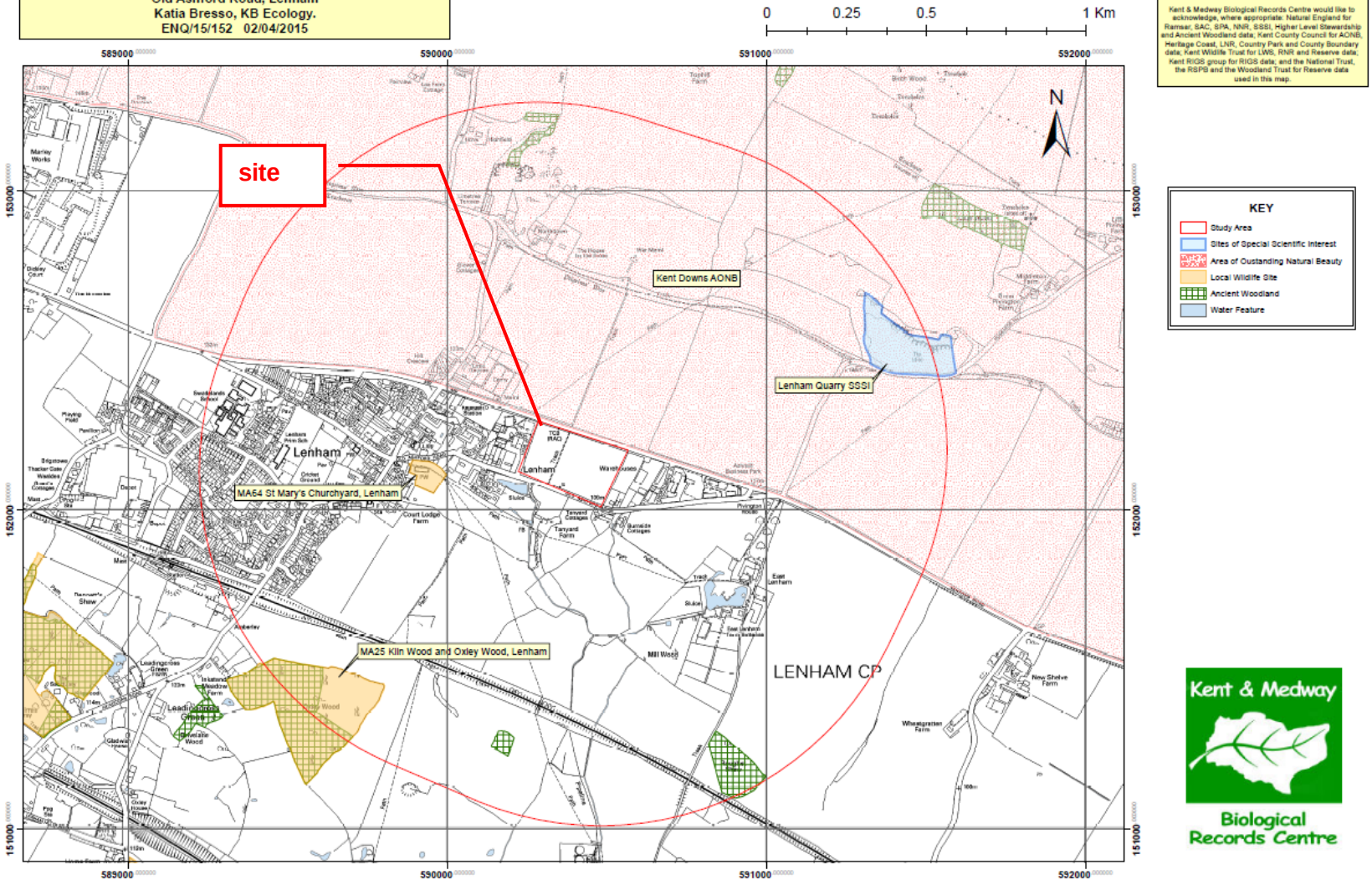
Figure 2

Kent & Medway Biological Records Centre

Map showing the statutory and non-statutory designated sites, ancient woodland, higher level stewardship and water features at Old Ashford Road, Lenham
Katia Bresso, KB Ecology.
ENQ/15/152 02/04/2015



Kent & Medway Biological Records Centre

3 Baseline Ecological Conditions

3.1 Designated Nature Conservation Sites

Lenham quarry is located 850m to the North East of the site and is designated as a Site of Special Scientific Interest SSSI for its geological interest. Hart Hill is also a geological SSSI and is located 4km to the East.

Local Wildlife Site (LWS) MA64 called 'St Mary's Churchyard, Lenham' is located 230m to the West of the site and LWS MA25, 'Kiln Wood and Oxley Wood, Lenham' is present 800m to the South.

3.2 Habitats

The site is located on the outskirts of Lenham village. It consists of two arable fields which are bounded by the A20 to the North and Old Ashford Road to the South, the community centre and surgery as well as a housing development, currently being built at the time of site visit, to the West and the Northdown Business Park, which consists of industrial/warehouse units with ancillary office accommodation and self-contained office buildings, to the East.

Small areas of scrub and a few trees (including hawthorn *Crataegus monogyna*, elder *Sambucus nigra*, holly *Ilex aquifolium*, blackthorn *Prunus spinosa*, ash *Fraxinus excelsior*, sycamore *Acer pseudoplatanus*) are present along the road verge of the A20 and a species-poor defunct hedge along Old Ashford road. Along the western boundary, young trees and bushes (including hazel *Corylus avellana*, *rosa sp,* wayfaring-tree Viburnum lantana, cherry *Prunus sp*, dogwood *Cornus sanguinea*, willow *Salix sp,* bramble *Rubus fruticosus agg*) are present, which were planted during the construction of the community centre and surgery some ten years ago.

A footpath/access runs across the middle of the site. A dry ditch runs along the A20 road verge. Species present along the A20 included common nettles *Urtica dioica*, cleavers *Galium aparine*, common knapweed *Centaurea nigra*, dog's mercury *Mercurialis perennis*, lords-and-ladies *Arum maculatum*, red dead-nettle *Lamium purpureum*, wild angelica *Angelica sylvestris,* wood avens *Geum urbanum*, oxeye daisy *Leucanthemum vulgare*, yarrow *Achillea millefolium*, lesser celandine *Ranunculus ficaria*, ivy *Hedera helix*, dock *Rumex sp*. A 1m wide strip of grass is also present in places around the field.

The KMBRC data search did not report the presence of any protected or rare of scarce species of flora within the site.

Plates are present in Appendix B. Figure 3 below shows the location of the habitats. Legend of Phase 1 habitat survey map hereafter:

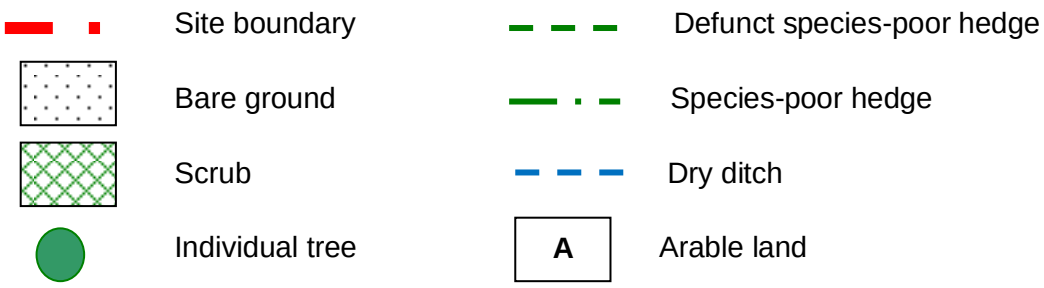


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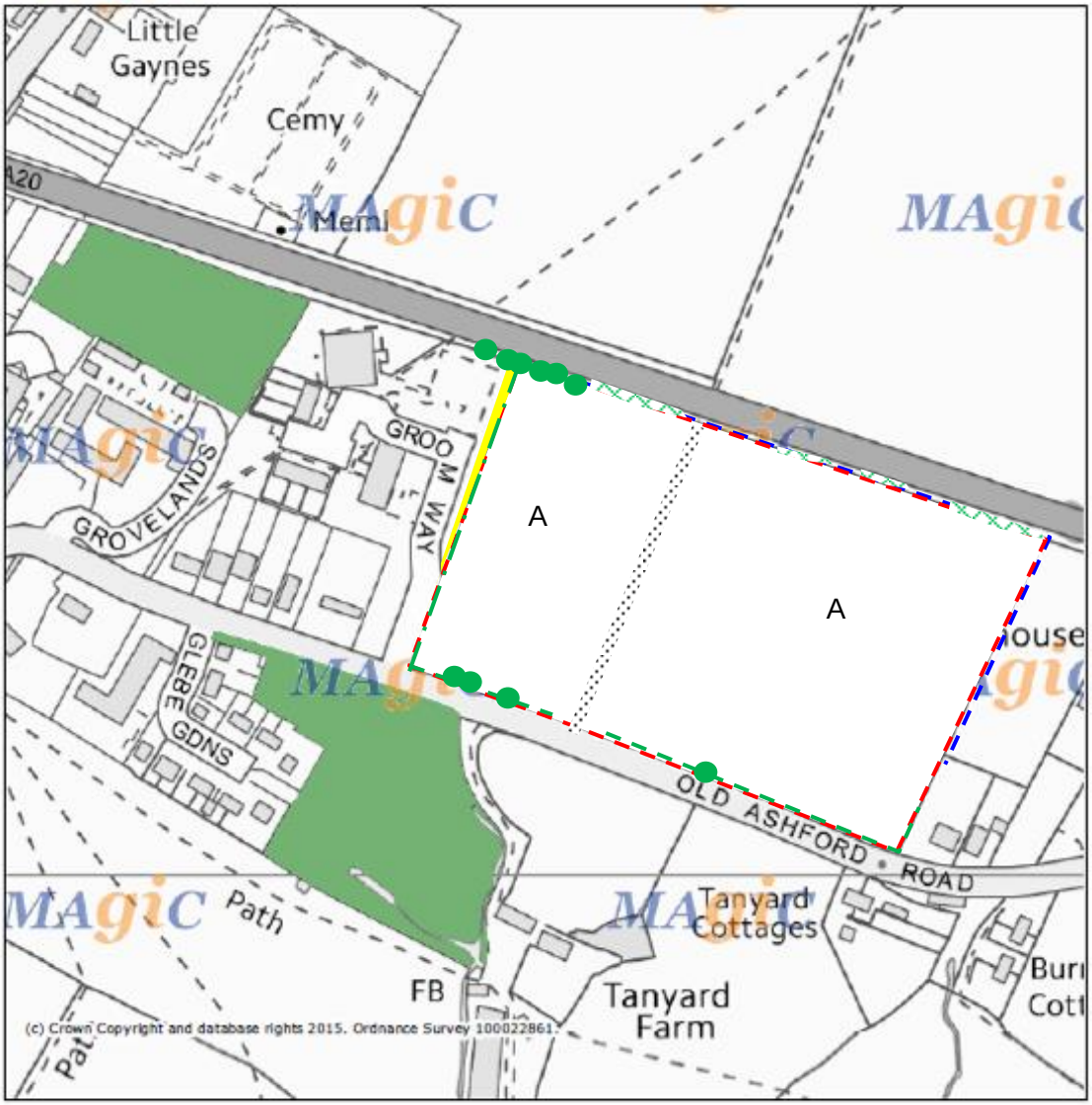
Figure 3



Legend

- Priority Habitat Inventory - Coastal Saltmarsh (England)
- Priority Habitat Inventory - Coastal Sand Dunes (England)
- Priority Habitat Inventory - Coastal Vegetated Shingle (England)
- Priority Habitat Inventory - Maritime Cliffs and Slopes (England)
- Priority Habitat Inventory - Mudflats (England)
- Priority Habitat Inventory - Saline Lagoons (England)
- Saline Lagoons (Wales)
- Saltmarsh (Wales)
- Sand Dunes (Wales)
- Priority Habitat Inventory - Calaminarian Grassland (England)
- Priority Habitat Inventory - Coastal and Floodplain Grazing Marsh (England)

Projection = OSGB36
xmin = 589800
ymin = 151800
xmax = 590800
ymax = 152500

Map produced by MAGIC on 27 April, 2015.
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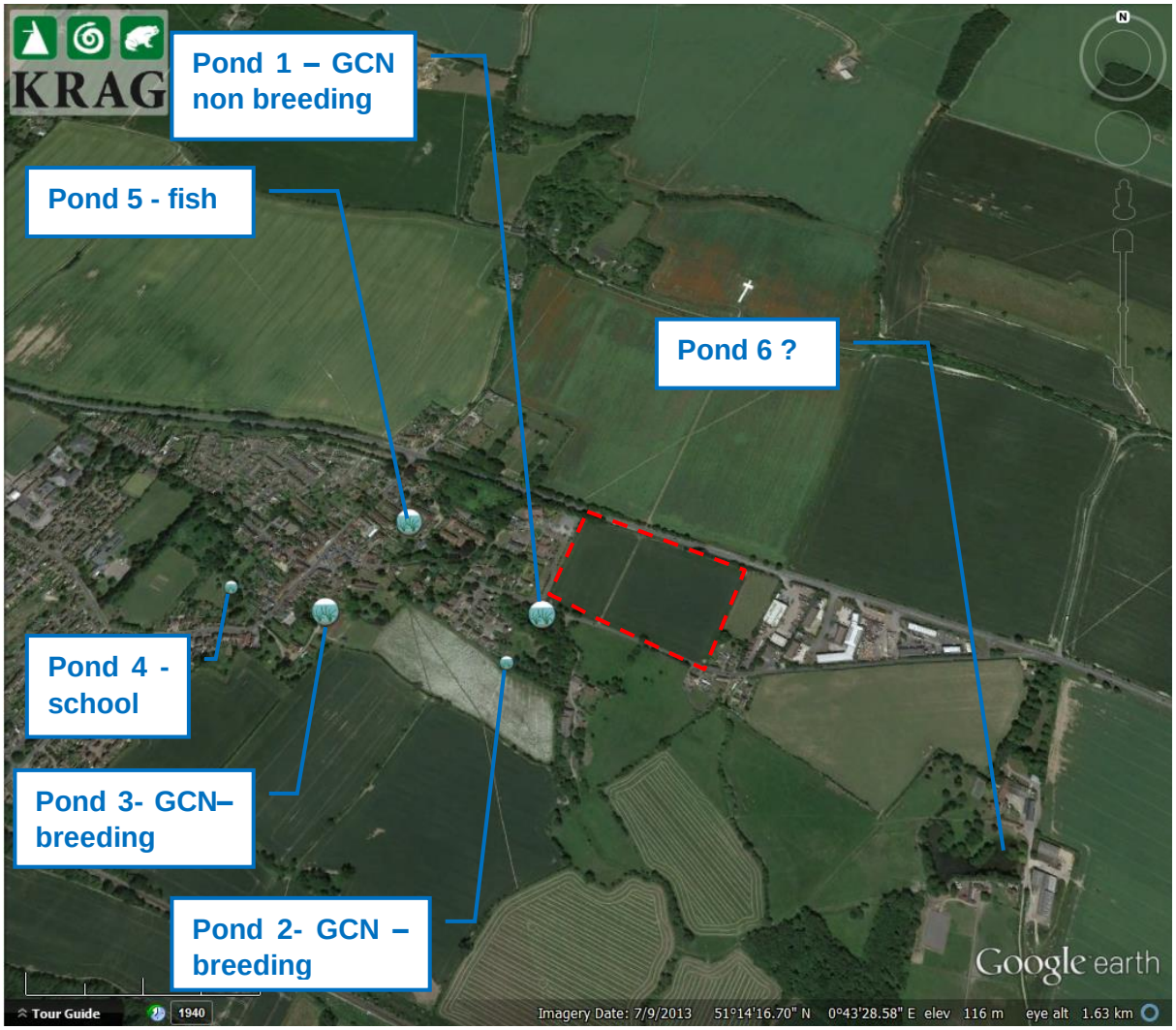
3.3 Amphibians

The data search carried out with KRAG (Enquiry No: ENQ/15/152) revealed that the closest recorded Great Crested Newt *Triturus cristatus* site is located at ashford road, Lenham, 0.28 km to the SW (record id: 39182). KRAG's database risk assessment indicates that the likelihood of presence of great crested newts *in the overall area* is *High*[3].

No ponds were present on site but six ponds are present within 500m and the nearest pond is present on the other side of the Old Ashford road, some 20m away. Great crested newts have been found in this pond in the past, but no breeding has been recorded there (record id: 39182).

Great crested newt surveys of ponds 1, 2, 3, 4 and 5 have been undertaken in 2014 by Lloyd Bore as part of a different planning application at the Paddock, Lenham (14/503411). The species was found in three of the six ponds (ponds 1, 2 and 3), with breeding confirmed in two ponds (ponds 2 and 3) with overall a low population. Pond 5 is a concrete lined garden pond stocked with lots of fish. Pond 4 is a recently built school pond. No great crested newts are known to be present, only smooth newts and frogs (K. Bresso pers com). Pond 6 is not known to have been surveyed.

[3] Likelihood of Presence Scores are described using the following categories: Unlikely<Possible<Likely<High



All the great crested newt ponds within 500m are to the South of the site and the nearest breeding pond is over 100m away. Therefore newts are not expected to cross the site to commute from one pond to another. The site consists of arable land which is a habitat which does not provide much food or cover for amphibians. Therefore, great crested newts are not expected to be present on site.

Common amphibian species are afforded limited legal protection under the Wildlife & Countryside Act 1981 (as amended). The great crested newt is afforded full legal protection under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). It is also listed under Schedule 2 of the Conservation of Habitats and Species Regulations 2010 and are therefore a European Protected Species (EPS). Great crested newts and common toads are also listed as species of principal conservation importance (See Appendix A).

For more information, guidance from Natural England is available at
https://www.gov.uk/great-crested-newts-protection-surveys-and-licences

3.4 Reptiles

The KRAG datasearch revealed that the closest recorded reptile is Slow-worm, located at

Lenham, approximately 0.32 km to the N (record id: 4685). The likelihood of reptiles to be present in the overall area is judged as per table below:

Reptiles

	Likelihood of Presence	
	Score	Dist (km)
Viviparous Lizard:	Possible	1.91
Slow-worm:	Likely	0.63
Sand Lizard:	*unlikely*	*45.70*
Grass Snake:	Likely	1.20
Adder:	Possible	3.31
Smooth Snake:	n/a	n/a

Reptile survey effort in local area is considered to be average.

The strip of grass along the road verge of A20 and the pockets of grass around the field could be used by a small population of reptiles (namely slow worms *Anguis fragilis* and common lizards *Zootoca vivipara)* as these habitats link to other suitable reptile habitats (there is a small unmanaged grassland adjacent to the East of the site where reptiles could be present).

Common reptiles are afforded limited legal protection under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). They are also listed as species of principal conservation importance (See Appendix A).

For more information, guidance from Natural England is available at https://www.gov.uk/reptiles-protection-surveys-and-licences

3.5 Birds

The KMBRC data search did not report the presence of any protected or rare of scarce species of birds within the site.

It is considered that the site has high potential to support breeding birds within the trees, hedges and scrub. Ground nesting birds, such as skylarks which were heard over head during the survey, could also be nesting on site.

All species of bird whilst actively nesting are afforded legal protection under the Wildlife & Countryside Act 1981 (as amended) and special penalties are available for offences related to birds listed on Schedule 1. Some species are also listed as species of principal conservation importance, including sky lark, common cuckoo, house sparrow, tree sparrow and song thrush (See Appendix A).

For more information, guidance from Natural England is available at https://www.gov.uk/wild-birds-protection-surveys-and-licences

3.6 Hazel Dormouse

The KMBRC data search did not report the presence of dormice within the site. It is considered that the site has no potential to support the hazel dormouse *Muscardinus avellanarius* due to lack of connection to suitable woodlands.

3.7 Badger

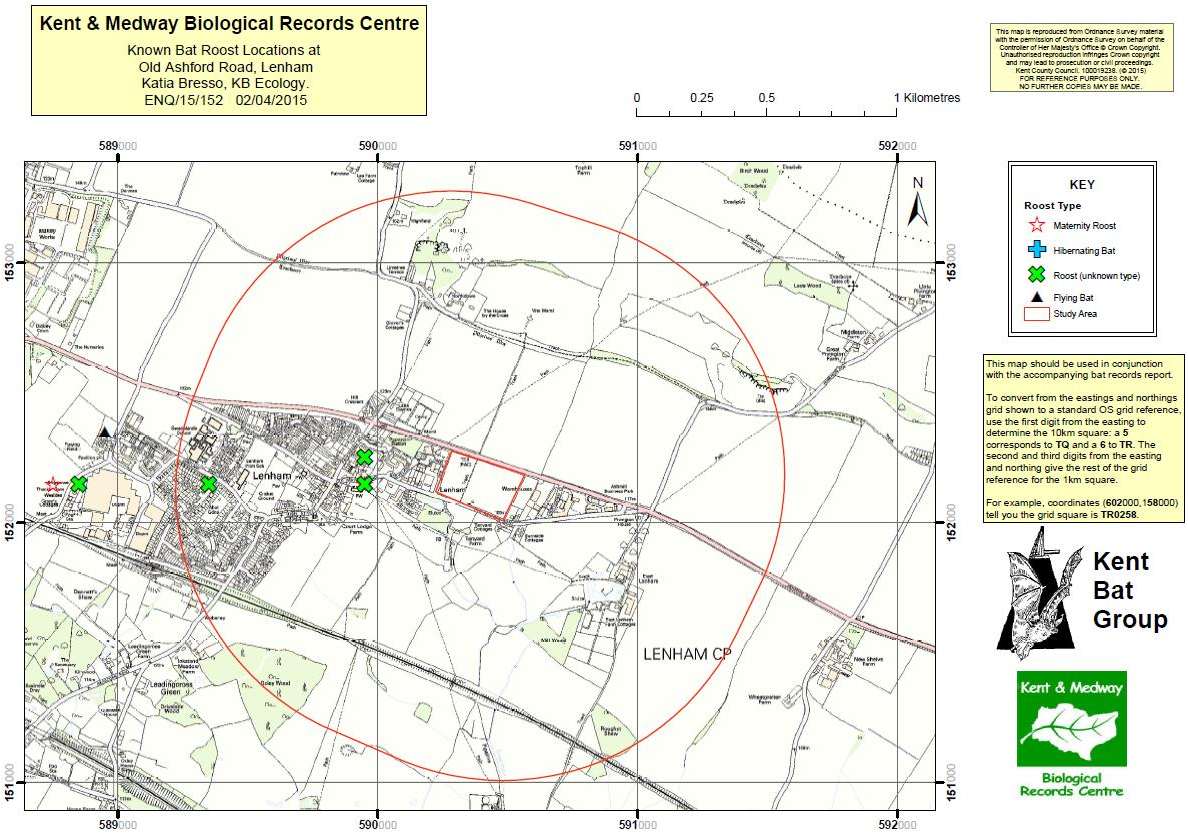
The KMBRC data search did not report the presence of badgers *Meles meles* within or adjacent to the site. No setts or signs of badgers were identified during the survey.

3.8 Bats

None of the trees present on site offered roosting potential for bats.

The KMBRC data search indicated that eight species of bat, of the 15 species recorded in Kent, have been recorded in this area, with three roosts present within the village, between 300m and 1km of the site. The eight species are

- Serotine Bat *Eptesicus serotinus*
- Daubenton's Bat *Myotis daubentonii*
- Whiskered Bat *Myotis mystacinus*
- Natterer's Bat *Myotis nattereri*
- Noctule Bat *Nyctalus noctula*
- Pipistrelle Bat (45kHz) *Pipistrellus pipistrellus*
- Pipistrelle Bat (55kHz) *Pipistrellus pygmaeus*
- Brown Long-eared Bat *Plecotus auritus*



The site may be used by foraging and commuting bats although it is unlikely to support many prey animals and therefore is unlikely to be used more than occasionally by bats.

All species of bat are afforded full legal protection under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). They are also listed under Schedule 2 of the Conservation of Habitats and Species Regulations 2010 and are therefore a "European Protected Species" (EPS). Some species of bats (noctule, soprano pipistrelle, brown long-eared bat, barbastelle) are also listed as species of principal conservation importance.

For more information, guidance from Natural England is available at https://www.gov.uk/bats-protection-surveys-and-licences

3.9 Other Species

It is considered that the site has high potential to support hedgehogs (*Erinaceus europaeus*), which are a Species of Principal Importance under Section 41 of the NERC Act (2008 updated list). Hedgehog droppings were found in the amenity grassland at the community centre.

It is considered unlikely that the site supports brown hare *Lepus europaeus* due to its lack of connectivity to other suitable habitat.

All mammals are afforded protection against unnecessary suffering by the Wild Mammals (Protection) Act 1996 (see Appendix A).

4 Ecological constraints and opportunities, recommendations for mitigation and further survey

The details of the proposed development were not known at the time of writing this report.

Should the scope of the proposed works be amended following the completion of this scoping survey, or be deferred for an extended period of time, there may be a requirement to update this scoping report and its recommendations.

4.1 Designated Nature Conservation Sites

A site check report was generated for the site using the Impact Risk Zones on the Magic website[4]:

Site Check Report Report generated on Mon Apr 27 2015
You selected the location: Centroid Grid Ref: TQ903521
The following features have been found in your search area:

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	Airports, helipads and other aviation proposals.
Wind & Solar Energy	
Quarry	
Rural Non Residential	
Residential	
Rural Residential	
Air Pollution	
Combustion	
Waste	
Composting	
Discharges	
Water Supply	
Guidance	/Metadata_for_magic/SSSI IRZ User Guidance v2.1 MAGIC 09March2015.pdf

Residential housing is not listed as being a category for which the LPA should consult Natural England. No impacts are expected to result from the proposed development onto any designated sites. No further survey work or mitigation works are recommended.

4.2 Habitats

Trees to be retained should be protected during any construction work and guidance is given in the 'BS 5837:2012 Trees in relation to design, demolition and construction. Recommendations' document. This standard requires a tree protection plan to be developed which involves erecting physical barriers to prevent damage to existing trees, with an exclusion area around the trees. It also looks at defining a root protection area and requires consideration when compulsory work is carried out within the root protection area.

[4] The Impact Risk Zones (IRZs) dataset is a GIS tool which maps zones around each SSSI according to the particular sensitivities of the features for which it is notified and specifies the types of development that have the potential to have adverse impacts.

Natural England uses the IRZs to make an initial assessment of the likely risk of impacts on SSSIs and to quickly determine which consultations are unlikely to pose risks and which require more detailed consideration. Publishing the IRZs will allow LPAs, developers and other partners to make use of this key evidence tool.

http://www.naturalengland.org.uk/ourwork/planningdevelopment/impactriskzonesgistoolfeature.aspx

In order to reduce any risk of pollution incidents such as spillage of oil, diesel, detergents, cement, etc., or an increase in sedimentation from disturbance to the ponds on the other side of Old Ashford road, all work should follow recommendations given in the Environment Agency Pollution Prevention Guidance[5].

It is recommend to replace the lost hedgerow at a minimum of 'like for like' in length of hedge lost, using a mix of native species.

4.3 Amphibians

There are a number of development activities which can affect great crested newts, which should be fully considered at the application stage. Great crested newts can migrate more than 500 metres from their breeding ponds *in areas of suitable terrestrial habitat*. However, generally the scale of potential impacts will decrease as the distance from the breeding pond increases. Impacts on great crested newts could include:

	If GCN are present, would it be the case for this project?	
Habitat loss	Both the loss of breeding ponds and terrestrial habitat can have significant impacts upon great crested newts since newts live on land for the majority of their lives. Populations can be reduced or even go extinct where there is a major loss of habitat due to reduced foraging, breeding and refuge opportunities. Consequently, the mitigation strategy must ensure that there is no net loss of habitat (be it breeding ponds or terrestrial habitat) for newts.	**No**
Habitat modification	Although some development may not replace newt habitat with built land, it can be made less suitable. For example, changing an area of rough grassland used by newts as terrestrial habitat into amenity grassland could have a negative impact on the population. Therefore the mitigation strategy should ensure that there is no net loss in quantity and quality of habitat.	**No**
Habitat fragmentation and isolation	Habitat fragmentation and isolation of great crested newt populations can be caused when development imposes barriers to newt dispersal. These barriers can include built land, fast flowing water bodies or extreme landforms. Isolation of great crested newts can result in population number declines and a decrease in genetic viability. Therefore the mitigation strategy should include measures to maintain habitat linkages and preferably reconnect fragmented areas.	**No**
Miscellaneous	Other more indirect impacts caused by development also need to be fully considered, such as increased shading and siltation of ponds, water table alteration and potential for increased chemical run-off into waterbodies. Great crested newts can also be impacted by interference following a development, such as the introduction of fish to breeding ponds which will predate the young life stages of newts.	**No**

[5] Can be found here: https://www.gov.uk/government/collections/pollution-prevention-guidance-ppg

It is judged highly unlikely that any great crested newts be present on site or commute across the site and therefore no further survey work or mitigation works are proposed with regards to this species.

4.4 Reptiles

Slow worms and common lizards may be present in part of the site. It is therefore recommended to carry out a reptile survey looking at presence/absence and, if present, population size.

The survey would consist of placing artificial refuges (i.e. 0.5 m^2 tins or roofing felt) at a minimum density of 100 per hectare in areas of suitable reptile habitat and leaving them in place for at least 2 weeks prior to the survey commencing. The refuges would be checked on seven separate occasions, over a whole month, to establish presence / likely absence during suitable weather conditions (i.e. cool weather with no heavy rain but sunny intervals between showers, and ambient air temperatures between 10-20^{o}C). Should reptiles be recorded during the presence / absence survey, further visits may be recommended to establish relative population size. In addition, log piles, rock piles and building debris can also be searched under for the presence of reptiles.

Reptile surveys can be undertaken between March and October, the optimal months being April, May, June and September. Mid-summer temperatures and general activity levels are usually too high for refuges to be successfully used (surveys are highly weather dependent).

Should the presence of reptiles be confirmed through further surveys, mitigation may involve the installation of reptile exclusion fencing, and the trapping and translocation of reptiles during suitable weather conditions. Captured animals should be released into a receptor habitat made suitable beforehand. Such animal translocation exercises should only take place once planning permission has been granted.

Mitigation may also require the enhancement, replacement or creation of additional reptile habitats. These works may be necessary in advance and/or after the construction works.

4.5 Birds

Although a breeding bird survey is not deemed to be necessary, on the basis that the site contains suitable habitat for breeding birds, consideration must be given to the timing of vegetation removal, if any is to take place.

Should there be a requirement to remove any trees/shrubs that have the potential to be used by breeding birds, such works should be undertaken outside of the bird breeding season. The breeding bird season extends from March – August inclusive. It should be noted however that certain species are known to breed throughout the year (e.g. collard dove) and remain protected.

If trees/shrubs cannot be removed outside of the bird breeding season, an inspection by a qualified ecologist must first be completed a maximum of 48hrs before works commence. If during the inspection a nest considered to be in use is discovered, works must be delayed until the young have fledged.

With regards to the arable land itself, because of the potential presence of ground nesting birds, it is recommended that, should the works be required/recommended within the March-August period, the ground vegetation shall be kept low during this period until the start of the works (not higher than 15cm tall), to avoid any ground nests to establish prior to the works taking place.

4.6 Hazel Dormouse

No further work is recommended with regards to dormice.

4.7 Badger

No further work is recommended with regards to badgers.

4.8 Bats

No further work is recommended with regards to bats.

4.9 Other Species

There is some potential for hedgehogs to be present on site. Therefore any areas where mammals could be sheltering should be hand searched prior to disturbance. Excavations should not be left open for animals to fall into, or planks of wood should be placed to enable any animals which may fall into such a hole to escape.

4.10 Additional Recommendations: Enhancements

Ecological enhancements should where possible be incorporated into the proposed development to contribute towards the objectives of planning legislation below:
On 27 March 2012, the UK Government published the National Planning Policy Framework (NPPF) which states that "opportunities to incorporate biodiversity in and around developments should be encouraged"(Para 118).

The design and implementation of habitat enhancements could also be used to contribute towards the 'Home Quality Mark' or similar accreditation, should this be a consideration for this site.

Biodiversity enhancements for the site could include the following:

- Provision of hedgehog nesting boxes[6].
- Provision of 12cm square gaps under any new fencing to allow hedgehogs access onto all garden areas.
- Provision of ready-made bird boxes (sparrow terrace timber boxes or house martin nests for instance[7] or mix of open-fronted and hole-nesting boxes and constructed from woodcrete)[8].
- Provision of bat roosting spaces within the new buildings (examples can be found in: Williams, C (2010*). Biodiversity for Low and Zero Carbon Buildings: A Technical*

[6] http://www.hedgehogstreet.org/pages/hedgehog-homes.html

[7] to benefit these declining urban bird species

[8] In order not to damage trees, free-hanging nesting boxes can be hung from a loop or hook over a branch. This method avoids the use of nails. It is also helpful to avoid predation.

Guide for New Build. RIBA) or installation of ready-made bat boxes (such as Habibat[9], EcoSurv Bat Box or Schwegler Bat tube[10])[11].

- Tree / shrub/ hedgerow planting (native species to be used only).
- Establish climbing plants on walls and other vertical structures[12].
- Establish wildflower plug/bulb planting in amenity grassland[13].
- Use of grass-free tapestry lawns[14]
- Creation of drought-resistant wildflower garden to attract invertebrates and reduce need for water[15].
- Integration of Sustainable Urban Drainage Systems (SUDS)[16].
- Integration of green or grey roofs[17],[18],[19].
- Integration of a rain garden[20].
- Establish Fruit Espaliers[21].

Priority should be given to species present on the Kent BAP species list, which include great crested newt, common toad, viviparous lizard, slow-worm, grass snake, adder, house sparrow, tree sparrow, hedgehog, noctule, soprano pipistrelle, brown long-eared bat, brown hare, water vole, harvest mouse, dormouse, otter as well as many more species (see

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[9] Habibat is a large, solid bat box made of concrete with an internal roost space, which can be incorporated into the fabric of a building http://www.habibat.co.uk/

[10] http://www.bats.org.uk/publications_download.php/1109/BCT_BatBoxProductList_v4a.pdf

[11] It is highly recommended to install bird boxes near bat boxes to avoid birds from using the bat boxes to the detriment to bats.

[12] More information can be found here: http://www.greenblueurban.com/climbing-plant-guide.php and http://www.london.gov.uk/priorities/environment/urban-space/parks-green-spaces/green-roofs-walls

[13] Spring flowering bulbs and plugs of nectar rich flowering plants should be embedded into amenity grassland to increase the biodiversity and amenity value of the grassland and to provide early sources of nectar for insects. Suitable bulbs include Snake's head fritillary *Fritillaria meleagris*, Ramsons *Allium ursinum*, Snowdrop *Galanthus nivalis*, Primrose *Primula vulgaris*, Bluebell *Hyacinthoides non-scriptus*, Wild daffodil *Narcissus pseudonarcissus*, Lesser celandine *Ranunculus ficaria*

[14] Tapestry lawns are a researched turf lawn alternative made by using specific mowing tolerant plants instead of grass http://www.grassfreelawns.co.uk/articles.html

[15] list of suitable species can be found in Natural England Guidance document (2007): 'NE29 - Plants for wildlife friendly gardens'. http://publications.naturalengland.org.uk/publication/52004
Further information can be obtained from a web-based database managed on behalf of Natural England by The Plant Press http://www.plantpress.com/wildlife/home.php or from RHS at http://apps.rhs.org.uk/advicesearch/Search.aspx#Practical

[16] http://www.ciria.org.uk/suds/index.html for more information

[17] http://www.environment-agency.gov.uk/business/sectors/91967.aspx, http://www.london.gov.uk/priorities/environment/urban-space/parks-green-spaces/green-roofs-walls and http://publications.naturalengland.org.uk/publication/31036 for more information

[18] An example of a company with extensive experience in designing biodiverse roofs in Central London: the Green Roof Consultancy http://www.greenroofconsultancy.com

[19] 'Creating green roofs for invertebrates – a best practice guide' by Buglife http://www.kentbap.org.uk/images/uploads/Creating_Green_Roofs_for_Invertebrates_Best_practice_guidance.pdf

[20] http://www.wwt.org.uk/visit-us/festival-of-gardening/rain-gardening-how-and-why for more information

[21] http://apps.rhs.org.uk/advicesearch/profile.aspx?PID=319 for more information

http://www.kentbap.org.uk/habitats-and-species/priority-species/).

The landscape architect in charge of the project should be able to advise whether/how to incorporate such enhancements. To select the appropriate planting schedule, the landscape architect should consult the Natural History Museum's postcode plants database[22].

[22] http://www.nhm.ac.uk/nature-online/life/plants-fungi/postcode-plants/

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Websites Visited:

- https://cms.esriuk.com/tunbridgewells/Sites/KWT_External/
- http://magic.defra.gov.uk/MagicMap.aspx

[23] http://www.jncc.gov.uk/pdf/pub90_HandbookforPhase1HabitatSurveyA5.pdf

Appendix A – Wildlife Legislation & Policy

The following is a summary of wildlife legislation and planning policy which affords protection to plants and animals and seeks to conserve, enhance and restore biodiversity. This section is provided for general guidance only. While every effort has been made to ensure accuracy, this section should not be relied upon as a definitive statement of the law.

For further information, please see:
https://www.gov.uk/protected-species-and-sites-how-to-review-planning-proposals
and
https://www.gov.uk/government/policies/protecting-biodiversity-and-ecosystems-at-home-and-abroad/supporting-pages/species-protection

Commonly encountered protected species

Many species of plants, invertebrates and animals receive protection under the legislation detailed above. However, of these, the following are the most likely to be affected by development in the southeast:

Species	Legislation
Bats (all species) Dormice Great crested newts Otters Sand lizards and smooth snakes	The Wildlife and Countryside Act 1981 (as amended) & The Conservation of Habitats and Species Regulations 2010. These make it an offence to: • Deliberately or recklessly capture, injure or kill any wild animal of a European protected species • Deliberately or recklessly disturb wild animals of any such species • Damage or destroy their breeding site or resting place • Keep, transport, sell or exchange, or offer for sale or exchange, any live or dead animal, or any part of, or anything derived from these species. Disturbance of animals includes in particular any disturbance which is likely • to impair their ability: - to survive, to breed or reproduce, or to rear or nurture their young, or - in the case of animals of a hibernating or migratory species, to hibernate or migrate; • to affect significantly the local distribution or abundance of the species to which they belong.

Species	Legislation
Breeding birds (in particular barn owls)	The Wildlife and Countryside Act 1981 (as amended). This makes it illegal to intentionally kill, injure or take any wild bird and to take, damage or destroy the nest (whilst being built or in use) or eggs.
Adders, grass snakes, common lizards and slow worms	The Wildlife and Countryside Act 1981 (as amended) (intentional killing and injuring only). This makes it illegal to kill or injure these animals.
Water voles	The Wildlife and Countryside Act 1981 (as amended). This makes it illegal to intentionally damage, destroy or obstruct access to any structure or place which water voles use for shelter or protection; it is also an offence to intentionally disturb water voles while they are using these places.
White clawed crayfish	The Wildlife and Countryside Act 1981 (as amended). This makes it an offence to: • intentionally, or recklessly, kill or injure any of the above species, and/or; • sell, or attempt to sell, any part of the species, alive or dead. Advertises that he buys or sells, or intends to buy or sell.
Badgers	The Protection of Badgers Act 1992. This makes it an offence to: • Willfully killing, injures or takes, or attempts to kill, injure or take, a badger. • Cruelly ill-treating a badger, digging for badgers, using badger tongs, using a firearm other than the type specified under the exceptions within the Act. • Interfering with a badger sett by damaging, destroying, obstructing, causing dog a dog to enter a sett, disturbing an occupied sett - either by intent or by negligence. • Selling or offering for sale a live badger, having possession or control of a live badger. • Marking a badger or attaching any ring, tag, or other marking device to a badger.

The Wildlife and Countryside Act 1981 (as amended)

The Wildlife and Countryside Act 1981 (as amended) implements the Birds Directive (1979) and the Berne Convention (1979) into national legislation. The Wildlife and Countryside Act 1981 (as amended) includes a number of Schedules which are reviewed (usually every five years) on which details of the protected species, and their level of protection, are detailed. A

detailed summary of the sections of the Wildlife and Countryside Act, along with the protection afforded under them can be found within Paragraphs 118-122 of ODPM Circular 06/2005 (Circular06/2005)

Full details of the legislation can be found at www.jncc.gov.uk/page-3614 and details of the species listed on the Schedules can be found at:

- Birds www.jncc.gov.uk/PDF/waca1981_schedule1.pdf
- Animals www.jncc.gov.uk/page-1815
- Plants www.jncc.gov.uk/page-1816

There are no licensing functions within the Wildlife and Countryside Act for development activities which may affect a species protected under The Wildlife and Countryside Act 1981 (as amended) and works need to proceed following good practice and if appropriate rely on the 'incidental result of an otherwise lawful operation defence'. However, with regards to the water vole, where translocation of animals is proposed, Natural England does not feel this could be considered the incidental result of other activities and so would not be covered by the defence in the legislation. If there is no alternative to translocation, Natural England may be able to issue a licence to trap and translocate the water voles for the purpose of conservation.

The Countryside and Rights of Way Act 2000

The Wildlife and Countryside Act 1981 was amended by the Countryside and Rights of Way Act (CRoW Act) in 2000. The CRoW Act strengthened the protection afforded to species listed within the Schedules of the Wildlife and Countryside Act by adding 'reckless' to several of the offences and increased the penalties for wildlife offences.

In addition, Section 74 of the CRoW Act introduced a new duty on Government Ministers and Department to further the conservation of biodiversity for habitats and species of principal importance. This was superseded by Sections 40 and 41 of the Natural Environment and Rural Communities (NERC) Act of 2006. Section 40 provides that every public authority must, in exercising its functions, have regard to the purpose of conserving biodiversity. Details of the lists of habitats and species provided for at Section 41 of the NERC act can be found at www.ukbap-reporting.org.uk/news/details.asp?X=45. The ODPM Circular 06/2005 (Circular06/2005) place a clear responsibility on Local Planning Authorities to further the conservation of habitats and species of principal importance where a planning proposal may adversely affect them.

Full details of the legislation contained within the Countryside and Rights of Way Act can be found at www.opsi.gov.uk/acts/acts2000/ukpga_20000037_en_1.

The Protection of Badgers Act 1992

The legislation affording protection to badgers is primarily concerned with animal welfare and the need to protect badgers from activities such as baiting and deliberate harm. The Protection of Badgers Act 1992 makes it an offence to:

- Wilfully kill, injure, take, possess or cruelly ill-treat a badger, or attempt to do so;
- To intentionally or recklessly interfere with a sett (this includes disturbing badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it).

As with The Wildlife and Countryside Act 1981 (as amended), there are several defences to prosecution in the legislation and the text should be consulted for details of these. Penalties for offences include fines up to £5,000, plus up to six months imprisonment for each illegal sett interference, or badger death or injury.

Full Details of the legislation can be found at
www.opsi.gov.uk/ACTS/acts1992/ukpga_19920051_en_1.

Conservation of Habitats and Species Regulations 2010 (SI 2010/490) came into force (the "2010 Regulations").

From 1st April 2010, these are now the principal means by which the Habitats Directive is transposed in England and Wales. This updates and consolidates all the amendments to the Regulations since they were first made in 1994.

The 2010 Regulations implement the European Habitats Directive into national legislation. Details of those species (often referred to as European protected species or EPS) which receive protection under these regulations can be found in Schedule 2 of the 2010 Regulations.

Full details of the legislation can be found at
http://www.opsi.gov.uk/si/si2010/uksi_20100490_en_1

The Regulations state that:

Part 3 - 41.—
(1) A person who:

(a) deliberately captures, injures or kills any wild animal of a European protected species,
(b) deliberately disturbs wild animals of any such species,
(c) deliberately takes or destroys the eggs of such an animal, or
(d) damages or destroys a breeding site or resting place of such an animal,

is guilty of an offence.

(2) For the purposes of paragraph (1)(b), disturbance of animals includes in particular any disturbance which is likely:

(a) to impair their ability:

(i) to survive, to breed or reproduce, or to rear or nurture their young, or
(ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate;

Or

(b) to affect significantly the local distribution or abundance of the species to which they belong.

(3) It is an offence for any person:

(a) to be in possession of, or to control,
(b) to transport,
(c) to sell or exchange, or
(d) to offer for sale or exchange, anything to which this paragraph applies.

(4) Paragraph (3) applies to—

(a) any live or dead animal or part of an animal—

(i) which has been taken from the wild, and

(ii) which is of a species or subspecies listed in Annex IV(a) to the Habitats Directive; and

(b) anything derived from such an animal or any part of such an animal.

(5) Paragraphs (1) and (3) apply regardless of the stage of the life of the animal in question.

(6) Unless the contrary is shown, in any proceedings for an offence under paragraph (1) the animal in question is presumed to have been a wild animal.

(7) In any proceedings for an offence under paragraph (3), where it is alleged that an animal or a part of an animal was taken from the wild, it is presumed, unless the contrary is shown, that that animal or part of an animal was taken from the wild.

(8) A person guilty of an offence under this regulation is liable on summary conviction to imprisonment for a term not exceeding six months or to a fine not exceeding level 5 on the standard scale, or to both.

(9) Guidance as to the application of the offences in paragraph (1)(b) or (d) in relation to particular species of animals or particular activities may be published by—

(a) the appropriate authority; or

(b) the appropriate nature conservation body, with the approval of the appropriate authority.

(10) In proceedings for an offence under paragraph (1)(b) or (d), a court must take into account any relevant guidance published under paragraph (9).

(11) In deciding upon the sentence for a person convicted of an offence under paragraph (1)(d), the court must in particular have regard to whether that person could reasonably have avoided the damage to or destruction of the breeding site or resting place concerned.

Licences may be obtained to permit activities that would otherwise be unlawful, but they can only be granted for certain purposes. Those purposes include that of preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment (Regulation 42(10). It is the imperative reasons of overriding public interest element of this that is relied upon by those seeking to carry out development where those activities affect a European protected species or their places used for shelter or protection. Even where that purpose is met, however a licence may only granted where:

- There is “no satisfactory alternative”; and
- The action authorised “will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range”

Natural England issues licences for this purposes under Regulation 44(2)(e).

It is not the responsibility of Natural England staff to decide when a licence is required/recommended. This decision is down to the proposer of the operation who should consider whether, on balance and usually with the assistance of an ecological consultant, the operation would be reasonably likely to result in the commission of an offence under these Regulations. This view should be formed in the light of survey information and specialist knowledge. A licence simply permits an action that is otherwise unlawful. A licence should be

applied for if, on the basis of survey information and specialist knowledge, it is considered that the proposed activity is reasonably likely to result in an offence (killing, breeding site destruction, etc – see above).

It should be noted that the protection afforded to species under the UK and EU legislation referred to here is in addition to that provided by the planning system and the applicant must ensure that any activity they undertake on the application site (regardless of whether or not planning permission has been obtained) complies with the appropriate wildlife legislation. Failure to do so may result in fines and, potentially, a custodial sentence.

Biodiversity Action Plans

Biodiversity Action Plans (BAPS) set out actions for the conservation and enhancement of biological diversity at various spatial scales. They consist of both Habitat Action Plans (HAPs) and Species Action Plans (SAPs).

The UK BAP was the UK's response to the 1992 Convention on Biological Diversity in Rio de Janeiro. Following a review in 2007 a list of 1149 priority species and 65 priority habitats has been adopted, which are given a statutory basis for planning consideration under Section 40 of the NERC Act 2006.

Further information about Kent BAP can be found here: http://www.kentbap.org.uk/habitats-and-species/priority-species/

Red Data Books

British Red Data Books (RDB) are an additional method for classifying the rarity of species, and are often seen as a natural progression from Biodiversity Action Plans.

RDB species have no automatic legal protection (unless they are protected under any of the legislation previously mentioned). Instead they provide a means of assessing rarity and highlight areas where resources may be targeted. Various categories of RDB species are recorded, based on the IUCN criteria and the UK national criteria based on presence within certain numbers of 10x10km grid-squares (see http://www.jncc.gov.uk/page-3425). As with Biodiversity Action Plans, where possible, steps should be taken to conserve RDB species which are to be affected by development.

Appendix B – Plates

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