ecology solutions

SHEPHERD NEAME

QUEEN COURT FARM, OSPRINGE, KENT

Ecological Assessment

March 2016
6956.EcoAs.vf

ecology solutions for planners and developers

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1. INTRODUCTION

1.1. Background & Proposals

1.1.1. Ecology Solutions was instructed by Milliken and Company on behalf of Shepherd Neame in November 2015 to undertake an updated ecological assessment of the site at Queen Court Farm, Ospringe, Faversham, Kent (see Plan ECO1).

1.1.2. The proposals for the site comprise new residential buildings with associated hardstanding and amenity planting and the demolition of existing farm buildings.

1.2. Site Characteristics

1.2.1. The site is bounded to the north mainly by Mutton Lane and residential housing beyond and to the east, south and west mainly by agricultural land, with a farm house and agricultural buildings adjacent to the southern boundary and Water Lane immediately adjacent to the western boundary.

1.2.2. The site comprises mainly agricultural buildings and associated hardstanding, semi-improved grassland, scrub and trees (see Photograph 1 and Plan ECO2).

1.3. Ecological Assessment

1.3.1. This document assesses the ecological interest of the site. The importance of the habitats within the site is evaluated with due consideration given to the guidance published by the Chartered Institute of Ecology and Environmental Management (CIEEM)[1].

1.3.2. Where necessary, mitigation measures are recommended so as to safeguard any significant existing ecological interest within the site and, where appropriate, potential enhancement measures are put forward and reference made to the Kent Biodiversity Action Plan (BAP).

[1] CIEEM (2016). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal*. 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.

2. SURVEY METHODOLOGY

2.1. The methodology utilised for the survey work can be split into three areas, namely desk study, habitat survey and faunal survey. These are discussed in more detail below.

2.2. Desk Study

2.2.1. In order to compile background information on the site and the surrounding area, Ecology Solutions contacted the Kent and Medway Biological Records Centre (KMBRC).

2.2.2. Further information on designated sites from a wider search area was obtained from the online Multi-Agency Geographic Information for the Countryside (MAGIC)[2] database. This information is reproduced at Appendix 1 and where appropriate on Plan ECO1.

2.3. Habitat Survey

2.3.1. Habitat surveys were carried out by Ecology Solutions in March 2011 and subsequently updated in January 2016 in order to ascertain the general ecological value of the site and to identify the main habitats and associated plant species.

2.3.2. The site was surveyed based around extended Phase 1 survey methodology[3], as recommended by Natural England, whereby the habitat types present are identified and mapped, together with an assessment of the species composition of each habitat. This technique provides an inventory of the basic habitat types present and allows identification of areas of greater potential which require further survey. Any such areas identified can then be examined in more detail.

2.3.3. Using the above method, the site was classified into areas of similar botanical community types, with a representative species list compiled for each habitat identified.

2.3.4. All the species that occur in each habitat would not necessarily be detectable during survey work carried out at any given time of the year, since different species are apparent at different seasons. Nonetheless, given the habitats present it is considered that an accurate and robust assessment has been made of the botanical interest.

2.4. Faunal Survey

2.4.1. Obvious faunal activity, such as birds or mammals observed visually or by call during the course of the surveys, was recorded. Specific attention was paid to any potential use of the site by protected species or other notable species.

2.4.2. In addition, specific surveys were undertaken for bats, Badger *Meles meles* and Barn Owl *Tyto alba* in 2011 and were repeated in 2016.

[2] http://www.magic.gov.uk
[3] Joint Nature Conservation Committee (2010). *Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit*. England Field Unit, Nature Conservancy Council, reprinted JNCC, Peterborough.

Bats

2.4.3. Specific surveys of the buildings within the site were undertaken in March 2011 and repeated in January 2016. The buildings were subject to internal and external surveys using ladders, mirrors, endoscope, torches and binoculars where necessary. Particular attention was paid to the roof structure with evidence searched for past or present activity within any voids and around joists.

2.4.4. Field surveys were undertaken following best practice guidelines issued by Natural England[4] and the Joint Nature Conservation Committee[5]. In preparing this document, regard was also had to the guidelines produced by the Bat Conservation Trust[6].

2.4.5. Evidence of the presence of bats in the buildings was searched for with particular attention paid to the roof. Specific searches were made for bat droppings that can indicate present or past use and extent of use, as well as other signs to indicate the possible presence of bats e.g. feeding remains, presence of stained areas or areas that are cobweb-free.

2.4.6. The probability of a building being used by bats as a summer roost site increases if it:

- is largely undisturbed;
- dates from pre-20th Century;
- has a large roof void with unobstructed flying spaces;
- has access points for bats (though not too draughty);
- has wooden cladding or hanging tiles; and/or
- is in a rural setting and close to woodland or water.

2.4.7. Conversely, the probability decreases if a building is of a modern or pre-fabricated design/construction, is in an urban setting, has small or cluttered roof voids, has few gaps at the eaves or is a heavily disturbed premises.

2.4.8. The main requirements for a winter/hibernation roost site is that it maintains a stable (cool) temperature and humidity. Sites commonly utilised by bats as winter roosts include cavities/holes in trees, underground sites and parts of buildings. Whilst different species may show a preference for one of these types of roost site, none are solely dependent on a single type.

2.4.9. In addition, in January 2016 all trees within the site were assessed for their potential use by bats. Binoculars and an endoscope were used where necessary.

2.4.10. For a tree to be classified as having some potential for roosting bats it must usually have one or more of the following characteristics:

[4] Mitchell-Jones, A. J. (2004). *Bat Mitigation Guidelines*. English Nature, Peterborough.
[5] Mitchell-Jones, A.J. & McLeish, A.P. (eds.) (2004). *Bat Workers' Manual*. 3rd edition. Joint Nature Conservation Committee, Peterborough.
[6] Bat Conservation Trust (2012). *Bat Surveys – Good Practice Guidelines*. 2nd Edition. Bat Conservation Trust, London.

- obvious holes, e.g. rot holes and old woodpecker holes;
- dark staining on the tree below a hole;
- tiny scratch marks around a hole from bats' claws;
- cavities, splits and / or loose bark from broken or fallen branches, lightning strikes etc; and / or
- very dense covering of mature Ivy over the trunk.

2.4.11. The site was also appraised in terms of its value for to foraging and commuting bats.

Badgers

2.4.12. Specific surveys were carried out in March 2011 and January 2016, and comprised two main elements. The first of these was a thorough search for evidence of Badger setts. If any setts were encountered each sett entrance was noted and plotted even if the entrance appeared disused. The following information was recorded:

i) The number and location of well used or very active entrances; these are clear from any debris or vegetation and are obviously in regular use and may, or may not, have been excavated recently.

ii) The number and location of inactive entrances; these are not in regular use and have debris such as leaves and twigs in the entrance or have plants growing in or around the edge of the entrance.

iii) The number of disused entrances; these have not been in use for some time, are partly or completely blocked and cannot be used without considerable clearance. If the entrance has been disused for some time all that may be visible is a depression in the ground where the hole used to be and the remains of the spoil heap.

2.4.13. Secondly, Badger activity such as well-worn paths and run-throughs, snagged hair, footprints, latrines and foraging signs was recorded so as to build up a picture of the use of the site, if any, by Badgers.

Birds (Barn Owl)

2.4.14. The buildings were subject to internal and external searches for evidence of nesting birds and in particular Barn Owls during the surveys undertaken in March 2011 and January 2016.

2.4.15. Specific searches were made for birds' nests, Owl pellets, droppings, food remains, feathers and other signs that can indicate present or past use and extent of use.

3. ECOLOGICAL FEATURES

3.1. Habitat surveys were undertaken within the site by Ecology Solutions in March 2011 and January 2016.

3.2. The following main habitat / vegetation types were identified:

- Buildings;
- Semi-improved Grassland;
- Tall Ruderal;
- Hedgerow;
- Scrub;
- Trees;
- Compost Heap;
- Japanese Knotweed; and
- Hardstanding and Recolonising Ground.

3.3. The locations of these habitats are shown on Plan ECO2.

3.4. Buildings

3.4.1. There are nine buildings within the site. These are agricultural buildings (see Photograph 1) and are labelled B1 to B9 on Plan ECO2.

3.4.2. B1 is an open barn, its primary purpose being a cattle shelter although it does not appear to have been used as such for a long time. It has a concrete frame and rafters, a pitched corrugated asbestos roof and wooden boarding made from railway sleepers along the south side. It also supports plastic mesh netting along the top half of the sides of the building and open metal gates on the northern side (see Photograph 2).

3.4.3. B2 is a single storey brick and breeze block construction, with wooden beams and rafters and a pitched corrugated metal roof. One half is permanently open on south side (see Photograph 3), whereas the eastern half is enclosed and was formerly used as a chicken coop.

3.4.4. B3 is a disused cylindrical polytunnel in a poor state of repair. It has a metal frame, is covered in clear plastic and insulated with bubble wrap. The doors are also made of clear plastic and framed with wood (see Photograph 5).

3.4.5. B4 is a single storey breeze block structure, with a pitched corrugated metal roof insulated with plasterboard and electric strip lighting and is used for storing gardening materials (see Photograph 4). The interior is quite bright and draughty and also contains a large walk-in freezer chamber.

3.4.6. B5 is a single storey barn with a pitched corrugated asbestos roof and metal beams. Some breeze blocks are located on the sides, although this building is open-sided in the main making the interior light and draughty in nature.

3.4.7. B6 is similar to B3 in that it is a disused cylindrical polytunnel with a metal frame that is covered in clear plastic and has clear plastic doors supported in wooden frames.

3.4.8. B7 is a single storey building that has a metal frame supporting a pitched corrugated asbestos roof. It is open sided, partially clad on one side with wooden railway sleepers and plastic mesh netting. Attached to this building is a small open-sided lean-to that is constructed of corrugated metal with a metal structure supporting a sloping roof. This building has a significant amount of Ivy *Hedera helix* growing on the eastern side.

3.4.9. B8 is similar to B1, as it is a disused, open-sided barn, previously used for containing cattle. It has a metal structure with a pitched asbestos roof containing skylights and is partially clad on three sides in wooden railway sleepers and plastic mesh netting, the eastern side being left open, with metal gates. This building has a significant amount of Ivy growing on the eastern side (see Photograph 7).

3.4.10. B9 is a metal shipping container which does not appear to have any access points to the inside and is located immediately to the west of B4 (see Photograph 1).

3.4.11. There is also a concrete trough between B7 and B8, which did not contain any water at the time of the survey.

3.5. **Semi-improved Grassland**

3.5.1. SI1 is an area of rank, tussocky, lightly managed semi-improved grassland to the north and west of B8 and is on a slope which faces south (see Photographs 6 and 7). It is dominated by Yorkshire Fog *Holcus lanatus*, with other species including Common Ragwort *Senecio jacobaea*, Nettle *Urtica dioica* and Bristly Ox-tongue *Helminthotheca echioides*.

3.5.2. SI2 is a field of semi-improved grassland located in the northern part of the site. This grassland is used as pasture and is therefore regularly grazed, with a medium to short sward height at the time of the surveys. This field is dominated by Fescue *Festuca* sp. and Perennial Rye Grass *Lolium perenne* mix with patches of Yorkshire Fog. Other species include Cock's-foot *Dactylis glomerata*, Bent *Agrostis* sp., Dovesfoot Cranesbill *Geranium molle*, Field Speedwell *Veronica persica*, Creeping Buttercup *Ranunculus repens,* Spear Thistle *Cirsium vulgare*, Nettle, Common Ragwort, Common Mallow *Malva sylvestris*, White Clover *Trifolium repens*, Dandelion *Taraxacum officinale*, Daffodil *Narcissus* sp., Dog's Mercury *Mercurialis perennis*, Ground Ivy *Glechoma hederacea* and Bristly Ox-tongue*.*

3.6. **Tall Ruderal**

3.6.1. Small areas of tall ruderal vegetation are located along the margins of the semi-improved grassland (see Photographs 7 and 8). Species present include Nettle, Bramble *Rubus fruticosus*, Lesser Burdock *Arctium minus*, Teasel *Dipsacus fullonum*, Knapweed *Centaurea nigra*, Lords and Ladies *Arum maculatum*, Mugwort *Artemisia vulgaris*, Stinking Iris *Iris foetidissima*, Ivy *Hedera helix,* Green Alkanet *Pentaglottis sempervirens*, Cleavers *Galium aparine* , Spear Thistle, Cow Parsley *Anthriscus sylvestris*, Germander Speedwell *Veronica chamaedrys*, White Dead Nettle *Lamium album* and Hogweed *Heracleum sphondylium*.

3.7. **Hedgerow**

3.7.1. H1 is a former hedgerow. It is located along the western boundary of the site and separates it from the adjacent Water Lane road. It is now sparse and resembles a band of scrub. Species in this habitat include Elder *Sambucus nigra*, Elm *Ulmus procera*, Bramble, Ivy, Garlic Mustard *Alliaria petiolata*, Nettle, Creeping Thistle *Cirsium arvense* and Cow Parsley.

3.8. **Trees**

3.8.1. There are five significant White Poplar *Populus alba* trees within the site, located immediately to the east of SI2. Four of these present splits and cracks in the branches and trunks, the latter also showing signs of significant butt rot (see Photograph 9).

3.9. **Compost Heap**

3.9.1. A compost heap is located to the west of B5. It is disused, which has allowed the establishment of a collection of tall ruderal and garden escape species. Species include Nettle and White Dead-Nettle *Lamium album*.

3.10. **Scrub**

3.10.1. Areas of scrub are located along the eastern and northern sides of B8 (see Photograph 7), the western side of SI2 beyond the trees and along the northern and eastern sides of the compost heap. Species present include Elder, Sycamore *Acer pseudoplatanus*, Buddleia *Buddleja davidii*, Dog Rose *Rosa canina*, Bramble, Ivy, Traveller's Joy *Clematis vitalba*, Hedge Bindweed *Calystegia sepium*, Stinking Iris and Nettle.

3.11. **Japanese Knotweed**

3.11.1. A stand of Japanese Knotweed *Fallopia japonica* is present on the northwest corner of B8 (see Photograph 10). It is approximately 5m by 3m. Another much larger stand is located offsite to the west of B8, adjacent to the semi-improved grassland (see Photograph 7 and Plan ECO2).

3.12. **Hardstanding and Recolonising Ground**

3.12.1. The areas of hardstanding on site are associated with the agricultural buildings. This hardstanding has not been regularly maintained and is in a poor state of repair, which has led to significant colonisation by mosses and other early colonising and opportunistic species over the hardstanding and in the cracks and crevices, leading to patches of recolonising ground.

3.12.2. Species in this habitat include Nettle, Bristly Ox-tongue, Elder, Teasel, Creeping Thislte, Dog's Mercury, Petty Spurge *Euphorbia peplus*, Bittersweet *Solanum dulcamara*, Ivy, Greater Mullein *Verbascum thapsus*, American Willowherb *Epilobium ciliatum*, Scentless Mayweed *Tripleurospermum inodorum*, Selfheal *Prunella vulgaris*, Cleavers, Broad-leaved Dock *Rumex obtusifolius* and Daisy *Bellis perennis*.

3.13. **Background Records**

3.13.1. No notable plant species were recorded during the survey work.

3.13.2. The Kent and Medway BRC returned no notable plant records from within the site.

3.13.3. Several notable records were returned from within the data search area. The most notable of these are ten records of Monkey Orchid *Orchis simia*, the closest and most recent of which was recorded approximately 2.2km to the southwest in 2013 and Bluebell *Hyacinthoides non-scripta* the closest of which was recorded approximately 1.2km to the southwest in 2005 and the most recent being in 2014, approximately 1.7km to the northwest of the site which are both listed in the Wildlife and Countryside Act. Monkey Orchid is also listed in Section 41 of the Natural Environment and Rural Communities Act 2006 (NERC Act).

3.13.4. The species mentioned above are not likely to be present on site, due to the lack of suitable habitat. No further survey work or mitigation measures are required for notable plants and consequently no further regard to notable plants will be given in this report.

4. WILDLIFE USE OF THE SITE

4.1. During the survey work, general observations were made of any faunal use of the site, with specific attention paid to the potential presence of protected or notable species.

4.2. Bats

4.2.1. The internal and external surveys undertaken of the buildings within the site recorded no evidence of bats. In addition, due to their light interiors, fabric and open nature, they are overall not considered to be suitable for bats.

4.2.2. Evidence of bats using the building adjacent to the southern boundary of the site, however, has been recorded and this building is considered to have very high potential for roosting and foraging bats.

4.2.3. Four trees within the site have been identified as having the required features to support roosting bats. These are four White Poplars out of a band of five located to the east of the field of semi-improved grassland SI2. These trees present cracks, splits and Woodpecker *Picus* sp. holes that could be used by roosting bats. A closer examination with an endoscope from ground level did not reveal any bats roosting in these trees at the time of the survey.

4.2.4. It is expected that bats may use the former hedgerow and the band of trees as a foraging and commuting resource, although there are more extensive opportunities immediately off site and in the wider local area.

4.2.1. The closest record for a bat returned by the desk study was for Soprano Pipistrelle *Pipistrellus pygmaeus* roost, recorded approximately 0.1km to the south of the site in 1999. The most recent bat records relate to Long-eared Bat *Plecotus* sp. roost, recorded approximately 1.4km away to the southeast of the site in 2014. The most recent record of Soprano Pipistrelle was also in 2014, recorded approximately 1.7km to the north of the site, and the nearest record for Long-Eared Bat is approximately 0.5km to the southwest of the site, also in 1999.

4.2.2. Other bat records within the search area of the site are of Noctule Bat *Nyctalus noctula* and Common Pipistrelle *Pipistrellus pipistrellus*, all recorded approximately 0.8km away to the northwest of the site in 2013. The most recent record for Noctule Bat was in 2014, located approximately 1.6km to the southeast of the site; the most recent record of Common Pipistrelle was in 2014, located approximately 1.7km to the north of the site. Brown Long-eared Bat *Plecotus auritus* was also recorded, the nearest of which is located approximately 0.9km to the west of the site in 1996 and the most recent in 2014 approximately 1.7km to the north of the site; Nathusius' Pipistrelle *Pipistrellus nathusii* most recently recorded in 2014 approximately 1.7km to the north of the site and the nearest record being located approximately at the same location in 2008 and Serotine Bat *Eptesicus serotinus* the nearest record being located approximately 1.7km to the north of the site in 1999 and the most recent record dating to 2013, approximately 5.6km to the northwest of the site.

4.2.3. Daubenton's Bat *Myotis daubentonii* was also recorded in the data search area, the nearest of which was located approximately 1.6km to the north of

the site in 2008 and most recent being in 2014, approximately 1.7km to the north of the site, as was Whiskered Bat *Myotis mystacinus*, the nearest and most recent record of which was located approximately 1.7km to the north of the site in 2014 and Natterer's Bat *Myotis nattereri*, the nearest record being located approximately 1.9km to the north of the site in 1998 and the most recent being located approximately 3.3km to the south of the site in 2013.

4.2.4. Bats for which the species was not determined are Myotis *Myotis* sp., the nearest and most recent of which was recorded in 2013, approximately 2.3km to the northeast of the site; Pipistrelle *Pipistrellus* sp., the nearest being approximately 0.2km to the south of the site in 1999 and most recent being in 2013, approximately 5.2km to the west of the site and Bat *Vespertilionidae* sp., located approximately 2.1km to the north of the site in 2005 for the most recent and the nearest being in 1992, located approximately 1km to the south of the site.

4.3. **Badgers**

4.3.1. The only evidence of Badger recorded during the survey was of some snuffle marks to the east of B8. No evidence of Badger was recorded within the site during the surveys undertaken in March 2011. The majority of habitats on site are unsuitable for this species on account of mainly comprising buildings and hardstanding, although there is some limited foraging potential within the tall ruderal, the scrub and the semi-improved grassland. Richer resources are present immediately off site.

4.3.2. Four records for Badger were returned by the desk study, the nearest and most recent record being located approximately 1.9km to the north of the site in 2003.

4.4. **Other Mammals**

Hedgehogs

4.4.1. The desk study returned thirty eight records of Hedgehog *Erinaceus europaeus*, the nearest being located approximately 0.4km to the north of the site in 2013 and the most recent being in 2014 approximately 1.5km to the north of the site.

4.4.2. The site only offers limited opportunities for Hedgehog. No further survey work or mitigation measures are required for this species and no further regard to Hedgehog is considered necessary in this report.

Dormice

4.4.3. None of the habitats present are considered suitable for Dormice. The hedgerows and scrub do not have the variety of species required by Dormice and are not connected to other areas of suitable habitat.

4.4.4. Information received from KMBRC did not return any Dormouse records from within the site or the desk study search area.

4.5. **Birds**

4.5.1. House Sparrow *Passer domesticus*, Great Tit *Parus major*, Blue Tit *Cyanistes caeruleus*, Blackbird *Turdus merula*, Wood Pigeon *Columba palumbus*, Chaffinch *Fringilla coelebs*, Robin *Erithacus rubecula*, Wren *Troglodytes troglodytes*, Song Thrush *Turdus philomelos* and Starling *Sturnus vulgaris* were recorded on site during the survey work, as well as a Buzzard *Buteo buteo* flying overhead.

4.5.2. Evidence of previous use of B1 by nesting birds was recorded as well as in the scrub adjacent to the east SI2. The White Poplars also show signs of use by Woodpecker.

4.5.3. The site offers further opportunities for nesting birds in terms of the trees, scrub and former hedgerow, but also within the buildings which are permanently open.

4.5.4. No evidence of use of the buildings by Barn Owl was recorded during the survey work.

4.5.1. Several bird species records were returned by the data search. The closest species recorded was Rook *Corvus frugilegus* in 1993, in a location adjacent to the north the site.

4.5.2. Amongst the most notable species found during the data search (listed on Schedule 1 of the Wildlife & Countryside Act 1981, as amended), the most relevant are as follows: the closest and most recent records for Red Kite *Milvus milvus*, Marsh Harrier *Circus aeruginosus*, Peregrine *Falco peregrinus*, Quail *Coturnix coturnix*, Black Redstart *Phoenicurus ochruros* and Osprey *Pandion haliaetus* are located in a grid square of approximately 0.9km to the northeast of the site, respectively in 2012, 2011, 2010, 2005, 2012 and 2008; the closest record for Hobby *Falco subbuteo* is located in the same 1km grid square as the site in 1997 and the most recent was recorded in 2008; the closest record for Barn Owl *Tyto alba* is located approximately 1.5km to the northwest in 1998, and the most recent being recorded in 2005 and the closest record for Cetti's Warbler *Cettia cetti* is located in a 1km grid square approximately 1.8km to the northwest of the site in 2008 with the most recent record being in 2011.

4.5.3. Lapwing *Vanellus vanellus*, Cuckoo *Cuculus canorus*, Skylark *Alauda arvensis*, Dunnock *Prunella modularis*, Yellow Wagtail *Motacilla flava*, Song Thrush, Spotted Flycatcher *Muscicapa striata*, Marsh Tit *Poecile palustris*, House Sparrow, Linnet *Carduelis cannabina*, Bullfinch *Pyrrhula pyrrhula*, Yellowhammer *Emberiza citrinella*, Corn Bunting Emberiza calandra, Tree Sparrow *Passer montanus* and Turtle Dove *Streptopelia turtur* are listed in Schedule 41 of the Natural Environment and Rural Communities Act 2006 and are recorded as breeding in the data search area.

4.5.4. A selection of notable wintering and migratory birds, have also been recorded in the data search area, these include: Merlin *Falco columbarius*, Honey Buzzard *Pernis apivorus*, Brent Goose *Branta bernicla*, Redwing *Turdus iliacus*, Fieldfare *Turdus pilaris* and Brambling *Fringilla montifringilla*.

4.5.5. Considering the relatively small size of the site and the presence of other richer sites in the local area, it is unlikely that many of these species do use

the site to any significant level. The removal of the habitats on site is unlikely to have any significant detrimental effect on the local bird populations.

4.6. Reptiles

4.6.1. No reptiles were recorded on site during the survey work.

4.6.2. The semi-improved grassland SI1 has a rank and tussocky sward which does not appear to be frequently maintained. Moreover, this habitat is on a slope which regularly exposes it to the sun, adding to its favourable condition for use by reptiles. The surrounding scrub and tall ruderal vegetation also creates opportunities for dispersal. Only a small part of this grassland is within the site boundary.

4.6.3. The semi-improved grassland field to the north is subject to regular management and grazing resulting in a rather short sward height and does not present significant opportunities for reptiles.

4.6.4. Information received from the data search returned several records for reptiles. The closest record of Slow Worm *Anguis fragilis* is located approximately 0.8km to the northeast of the site in 2011 the most recent being in 2013 approximately 1.1km to the north; the closest record for Grass Snake *Natrix natrix* was recorded approximately 0.5km to the north in 2011, the most recent record dating from 2013, located approximately 1.8km to the north of the site and the closest and most recent record for Common Lizard *Zootoca vivipara* is located approximately 1.1km to the southwest of the site in 2012.

4.7. Amphibians

4.7.1. There are no ponds present within the site. The nearest waterbodies to the site are two ponds located approximately 0.1km from the site, one to the north and the other to the south of the site. No amphibians have been recorded in these ponds and the habitats on site only present very limited terrestrial opportunities. It is therefore highly unlikely that amphibians, particularly Great Crested Newt *Triturus cristatus*, would be present on site.

4.7.1. Several records for amphibians were returned from the desk study. The closest record for Common Toad *Bufo bufo* is located approximately 0.8km to the northeast of the site in 2011, the most recent being located approximately 1.7km to the north in 2012; the closest record for Common Frog *Rana temporaria* is located approximately 0.8km to the northeast of the site in 2011 and the most recent is from 2012, located approximately 1.1km to the east of the site; the only record for Marsh frog *Pelophylax ridibundus* is located approximately 1.8km to the north in 2011; the closest record for Palmate Newt *Lissotriton helveticus* was in 2004, located approximately 1.1km to the north of the site, the most recent being in 2011, located approximately 1.8km to the north of the site and the closest records of Smooth Newt *Lissotriton vulgaris* were recorded approximately 0.8km to the northeast of the site in 2011, the most recent being in 2013 located approximately 1.9km to the north of the site.

4.7.2. Three records of Great Crested Newt were returned by the data search, the closest and most recent of which is located approximately 0.6km to the northwest of the site in 1990.

4.8. **Invertebrates**

4.8.1. The habitats on site are likely to support a collection of common invertebrate species, which is expected to become more varied with time, as the site is not regularly maintained and will continue to naturalise. There is no evidence to suggest that any protected or notable species are likely to be present.

4.8.2. Information received from the data search returned no records of any notable species from within the site. The closest most notable record was for Stag Beetle *Lucanus cervus,* a species listed in Annexe II of the Habitats Directive and Schedule 5 of the Wildlife and Countryside Act 1981, which was recorded 0.2km to the southeast of the site in 2004 and its most recent record was in 2014, approximately 1.8km to the southwest of the site.

5. ECOLOGICAL EVALUATION

5.1. The Principles of Ecological Evaluation

5.1.1. The latest guidelines for ecological evaluation produced by CIEEM proposes an approach that involves professional judgement, but makes use of available guidance and information, such as the distribution and status of the species or features within the locality of the project.

5.1.2. The methods and standards for site evaluation within the British Isles have remained those defined by Ratcliffe[7]. These are broadly used across the United Kingdom to rank sites, so priorities for nature conservation can be attained. For example, current Sites of Special Scientific Interest (SSSI) designation maintains a system of data analysis that is roughly tested against Ratcliffe's criteria.

5.1.3. In general terms, these criteria are size, diversity, naturalness, rarity and fragility, while additional secondary criteria of typicalness, potential value, intrinsic appeal, recorded history and the position within the ecological / geographical units are also incorporated into the ranking procedure.

5.1.4. Any assessment should not judge sites in isolation from others, since several habitats may combine to make it worthy of importance to nature conservation.

5.1.5. Further, relying on the national criteria would undoubtedly distort the local variation in assessment and therefore additional factors need to be taken into account, e.g. a woodland type with a comparatively poor species diversity, common in the south of England may be of importance at its northern limits, say, in the border country.

5.1.6. In addition, habitats of local importance are often highlighted within a local Biodiversity Action Plan (BAP). The Kent BAP highlights a number of habitats and species, which are referred to within this report where relevant.

5.1.7. Levels of importance can be determined within a defined geographical context from the immediate site or locality through to the international level.

5.1.8. The legislative and planning policy context are also important considerations and have been given due regard throughout this assessment.

5.2. Habitat Evaluation

Designated Sites

5.2.1. **Statutory Sites.** There are no statutory designations of nature conservation value within the site or immediately adjacent to it. The nearest statutory designation is the Swale Estuary Proposed Marine Conservation Zone (MCZ), located approximately 1.45km to the northeast of the site. It proposed for its highly biodiverse nature and its importance as a spawning ground for various species. The habitats in this zone complement those in

[7] Ratcliffe, D A (1977). *A Nature Conservation Review: The Selection of Biological Sites of National Importance to Nature Conservation in Britain*. Two Volumes. Cambridge University Press, Cambridge.

the Swale Ramsar Site, which is also a Special Protection Area (SPA) and a SSSI, designated for its saltmarshes, mudflats and grazing freshwater marsh, rich in plant and invertebrate species and supporting a large number of wintering birds. This site is located some 2km to the north of the proposed development site.

5.2.2. In accordance with the Conservation of Species and Habitats Regulations 2010 (as amended) ("the Habitats Regulations") any plan or project must be assessed against potential effects that could arise upon the integrity of a European designated site. Note that the 2010 regulations replaced the former regulations in place since 1994, and in the context of European sites (SPAs and SACs) they are little changed.

5.2.3. The test associated with development in proximity to the International European sites is set out in Part 1 of the ODPM / DEFRA Circular (ODPM 06/2005, DEFRA 01/2005) relating to Planning Policy Statement 9: Biodiversity and Geological Conservation (ODPM, August 2005). This includes a flow diagram (p.7) that sets out the series of steps competent authorities are required to make when considering proposals affecting Internationally Designated Wildlife Sites. The initial test at the screening stage is whether the proposal individually or in combination with other proposals is likely to be significant in terms of the ecological objectives for which the site was designated. If it is deemed that an effect is likely then there would be a requirement to undertake an assessment of the implications for the designated site's conservation objectives, which is known as an 'Appropriate Assessment'.

5.2.4. The key test of the Appropriate Assessment is set out in Article 6 para. 3 of the Habitats Directive: this states that "the competent national authorities shall agree to the plan or project only after having ascertained that is will not adversely affect the integrity of the site concerned…". These provisions are transposed into law in England and Wales by the Habitats Regulations 2010, and it is specifically regulations 61 and 62 which are relevant in the present case. The key difference between the requirements of the Habitats Regulations and those of the EIA Regulations is that there is no facility for planning balance or discretion on the part of the competent authority: permission can only be granted only after it has been established beyond reasonable doubt that the integrity of the designated site would not be adversely affected by the proposal. As clarified in Waddenzee – Landelijke Vereniging tot Behoud van de Waddenzee, Nederlandse Vereniging tot Bescherming van Vogels v Staatssecretaris Van Landbouw, Natuurbeheer en Visserij (Case C-127/02) [2004] Env LR 14 – a significant effect is considered to be likely if it cannot be excluded on the basis of objective information that the plan or project will have a significant effect on the designated site in question.

5.2.5. Furthermore the Habitats Regulations require the in-combination effect of developments to be taken into account; that is where small developments are not likely to have an effect when considered alone, but together over time could produce significant adverse effects.

5.2.6. Given the spatial separation, the existing intervening development and the lack of hydrological connections, it is not likely that there would be any direct adverse effects upon these designations as a result of the proposed development, during or after construction.

5.2.7. Until such time as a Strategic Access Management and Monitoring (SAMM) Strategy is agreed, it is understood that an interim approach has been adopted by Swale Borough Council, in which a per-unit tariff is to be collected for developments of more than ten units within 6km as-the-crow-flies of an access point to the SPA.

5.2.8. **Non-statutory Sites.** There are no non-statutory designated sites within the site itself, or immediately adjacent to it.

5.2.9. The nearest such site is the Ospringe Valley Local Wildlife Site (LWS), situated approximately 0.7km to the west of the site. Information received as part of the desk study is that it is of particular interest for its ancient broadleaf woodland. This site is separated from the development site by extensive agricultural land. Given this separation it is not likely that there would be any significant adverse effects as a result of the development.

5.2.10. A number of additional statutory and non-statutory sites and Ancient Woodland sites are located in the wider area as identified on Plan ECO1, but no significant adverse effects are anticipated.

Habitats

5.2.11. The habitats within the site consist of semi-improved grassland, tall ruderal, scrub, trees, a former hedgerow, buildings, hardstanding and recolonising ground.

5.2.12. The semi-improved grassland area SI1 and the trees are the two habitats with the most ecological interest on site. These consists of common and widespread species but offer good opportunities for wildlife.

5.2.13. It is recommended that, where possible, any retained areas of grassland are over-sown with a native wildflower seed mix in order to increase the floristic diversity of the site and that the trees are retained as they present significant potential for roosting bats.

5.2.14. The scrub, former hedgerow and tall ruderal vegetation are of no intrinsic ecological value, the species present being common and widespread, but they do offer opportunities for wildlife and allow the continuation of wildlife corridors in the form of the habitats immediately offsite and are therefore of some ecological interest.

5.2.15. It is recommended that the loss of scrub areas be mitigated by designing a landscape plan based on native species and, where possible of local provenance, with an emphasis on hedgerows and shrubs. This would contribute to maintain and enhance the wildlife corridors throughout the site and also help prevent the spread of non-native species into the surrounding countryside.

5.2.16. The use of native fruit-bearing species would enhance the foraging opportunities for a range of species, including birds and small mammals.

5.2.17. The buildings, compost heap, hardstanding and recolonising ground are of least ecological interest and their removal is of little ecological significance.

Invasive species

5.2.1. **Japanese Knotweed.** Japanese Knotweed is a non-native species, which is particularly invasive. It can regenerate from the smallest fragments of rhizomes (roots), or above ground from parts of the plant that may be broken off and transported to other locations. The species is particularly persistent, forming stands with rhizomes reaching down into the soil up to two metres in depth and up to a distance of seven metres laterally out from the main stand. These rhizomes can persist underground and, importantly, on potential development sites they can reportedly push up through two inches of tarmac, in a worst-case scenario.

5.2.2. Japanese Knotweed is listed in the Wildlife and Countryside Act 1981 (as amended) under Schedule 9 Part II which makes it an offence to cause to grow in the wild any plant listed on the schedule. As such, all relevant precautions should be taken when carrying out actions that could potentially spread the plant. In addition it should be noted that all soil and plant material (containing Japanese Knotweed) is regarded as controlled waste and is subject to various legal controls in terms of transporting and disposal off site. For example, the Environment Agency requires that this waste be disposed of at licensed landfill sites which have a lined contained system. As such careful consideration would need to be given to the disposal of any parts of the species.

5.2.3. It is recommended that a contractor specialising in Japanese Knotweed is commissioned to carry out the removal and eradication of this species and that a guarantee, of at least 10 years, is sought for the eradication exercise given the persistent nature of this species.

5.2.1. **Other Invasive Species.** Buddleia was also recorded on site and is listed as an invasive non-native species by the Non-Native Species Secretariat[8]. Although the control of this species is not a legal requirement, where works are proposed within or close to the boundary vegetation all reasonable measures should be taken to prevent the spread of this plant species. Where vegetation is to be removed the material should be disposed of at an approved facility.

5.2.2. Species listed by the Non-Native Species Secretariat should not be included in any landscape scheme for the proposed development.

5.3. Faunal Evaluation

Bats

5.3.1. **Legislation**. All bats are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and included on Schedule 2 of the Conservation of Habitats and Species Regulations 2010 ("the Habitats Regulations"). These include provisions making it an offence:

- Deliberately to kill, injure or take (capture) bats;
- Deliberately to disturb bats in such a way as to:-

[8] http://www.nonnativespecies.org

(i) be likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or to hibernate or migrate; or
(ii) affect significantly the local distribution or abundance of the species to which they belong;

- To damage or destroy any breeding or resting place used by bats;
- Intentionally or recklessly to obstruct access to any place used by bats for shelter or protection (even if bats are not in residence).

5.3.2. European Protected Species licences are available from Natural England in certain circumstances and permit activities that would otherwise be considered an offence.

5.3.3. **Site Usage.** No bats were recorded on site during the survey work. The buildings on site are not considered to be suitable for bats, due to their light interiors, fabric and open nature.

5.3.4. The Ivy present on the exterior of buildings B7 and B8 may present some suitable habitat for bats.

5.3.5. Four trees within the site present good potential for roosting bats. These contain splits, cracks and woodpecker holes. The former hedgerow and scrub on site present some limited opportunities for foraging and commuting bats, although richer opportunities are available in the immediate vicinity of the site and the wider local area.

5.3.6. A barn adjacent to the southern border of the site presents signs of use by bats and has overall very good potential for roosting bats.

5.3.7. **Mitigation and Enhancements.** It is understood that the trees to the east of SI2, including those presenting suitable roosting bat potential are to be retained as part of the development proposal. If these were to be proposed for removal, further work would be recommended.

5.3.8. It is recommended that any lighting within the site is directed away from the retained scrub and trees and also the barn to the south of the site. Where possible low pressure sodium lights, with hoods to direct light downwards, should be used in order to reduce light spillage.

5.3.9. It is also recommended that bat boxes be placed on the trees to provide additional roosting opportunities and enhance the biodiversity value of the site.

5.3.10. The proposals will result in the reduction in the amount of hardstanding present and the creation of new gardens, hedgerows, trees and a pond, which will significantly increase and enhance the foraging and commuting opportunities available for bats post-development.

Birds

5.3.11. **Legislation.** Section 1 of the Wildlife and Countryside Act 1981 (as amended) is concerned with the protection of wild birds, whilst Schedule 1 lists species that are protected by special penalties. All species of birds receive general protection whilst nesting.

5.3.12. **Site Usage.** A number of common birds and evidence of previous nesting were recorded during the survey work, but the site is not considered to be of any special ornithological interest and no currently nesting birds were recorded. It is likely that the trees, scrub and former hedgerow provide some foraging and nesting opportunities, although richer resources are present immediately offsite and in the wider local area.

5.3.13. **Mitigation and Enhancements.** A landscaping plan based around native and, where possible, fruit-bearing species would greatly enhance the opportunities for nesting and foraging birds on site.

5.3.14. The removal of suitable nesting habitat should be completed outside the nesting bird season (March to July inclusive). It should only be removed during this period after a survey by an experienced ecologist has confirmed the absence of any active nests to avoid a possible offence.

Reptiles

5.3.15. Legislation. Rare, endangered or declining species receive full protection under the Wildlife & Countryside Act 1981 (as amended) as well as protection under the Conservation of Habitats and Species Regulations 2010. Species that are fully protected are Smooth Snake Coronella austriaca and Sand Lizard Lacerta agilis. It is illegal to:

- Deliberately kill, injure or take (capture) these reptiles;
- Deliberately disturb these reptiles in such a way as to be likely:–
- to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or to hibernate; or
- to affect significantly their local distribution or abundance;
- Damage or destroy any breeding or resting place used by these reptiles;
- Intentionally or recklessly obstruct access to any place used by these reptiles for shelter or protection (even if the reptiles are not present at the time);
- Sell, offer for sale, possess or transport for purposes of sale these reptiles (live or dead animal, part or derivative).

5.3.16. Owing to their abundance in Britain, Common Lizard, Slow Worm, Grass Snake Natrix natrix and Adder Vipera berus are only 'partially protected' under the Wildlife & Countryside Act 1981 (as amended) and as such only receive protection from:

5.3.17.

- Intentional killing and injuring; and
- Being sold or other forms of trading.

5.3.18. The habitat of common reptiles is therefore not directly protected. However, because of their partial protection, disturbing or destroying their habitat while they are present may lead to an offence.

5.3.19. All reptile species are listed as a Species of Principal Importance under Section 41 of the Natural Environment and Rural Communities Act (NERC) 2006. The NERC Act places responsibility upon public bodies to have regard for the conservation of biodiversity in England.

5.3.20. **Site Usage.** No reptiles were recorded on site during the surveys, but the grassland in the east provides some limited potential habitat for reptiles.

5.3.21. **Mitigation and Enhancements.** Given the presence of a small amount of apparently suitable reptile habitat within the site, strimming of the grassland from west to east during the active season is recommended to persuade any reptiles that would be present to move away of their own accord. Overall, reptiles are not likely to be present within the site but this precautionary measure would be undertaken as a matter of best practice.

Amphibians

5.3.22. **Legislation.** All British amphibian species receive a degree of protection under the Wildlife and Countryside Act 1981 (as amended). The level of protection varies from protection from sale or trade only, as is the case with species such as Smooth Newt *Lissotriton vulgaris* and Common Toad *Bufo bufo*, to the more rigorous protection afforded to the Great Crested Newt *Triturus cristatus*.

5.3.23. Although Great Crested Newts are regularly encountered locally and throughout much of England, the UK holds a large percentage of the world population of the species. The UK has an international obligation to conserve the species, it receives full protection under domestic and European legislation and therefore receives the same level of protection as detailed previously for bats.

5.3.24. **Site Usage**. Although two ponds are located within 0.1km, the site is considered to offer negligible opportunities for amphibians.

5.3.25. **Mitigation and Enhancements.** The provision of a pond, as indicated in the development proposals, would enhance the site for amphibians. It is advised that this feature be planted with native species which would increase its value and provide cover for wildlife. Furthermore, the creation of new hedgerows will also increase the amount of terrestrial habitat present for these species.

Invertebrates

5.3.26. **Site Usage.** Given the habitats present, it is likely that a collection of common invertebrates is present on site. This assemblage is expected to diversify with time as the site is not regularly maintained and becomes more naturalised.

5.3.27. Records of Stag Beetle were returned as part of the desk study. This species is protected on a European and national level and is part of the Kent BAP. It is therefore recommended that dead wood piles should be placed within the site, particularly towards the eastern side of the semi-improved grassland field SI2 to encourage the use of the site by Stag Beetles. This would also increase the overall invertebrate diversity of the site.

5.3.28. The planting of native species will also contribute to enhancing the site, as these are known to support more invertebrate species than non-native species.

6. PLANNING POLICY CONTEXT

6.1. The planning policy framework that relates to nature conservation at the site is issued nationally through National Planning Policy Framework (NPPF) and locally through the emerging Swale Borough Local Plan (2015). Swale borough has also produced a Landscape Character and Biodiversity Appraisal Supplementary Planning Document (2011).

6.2. National Policy

National Planning Policy Framework

6.2.1. The National Planning Policy Framework (NPPF), published in March 2012, sets out the Government's requirements for the planning system. It replaces and revokes previous national planning policy, including PPS9: Biodiversity and Geological Conservation.

6.2.2. The key element of the NPPF is that there should be '*a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking*' (paragraph 14). It is important to note that this presumption '*does not apply where development requiring Appropriate Assessment under the Birds or Habitats Directives is being considered, planned or determined*' (paragraph 119).

6.2.3. A number of policies in the NPPF are comparable to those in PPS9, including reference to minimisation of impacts to biodiversity and provision of net gains to biodiversity where possible (paragraph 109) and ensuring that Local Authorities place appropriate weight to statutory and non-statutory nature conservation designations, protected species and biodiversity.

6.2.4. The NPPF also considers the strategic approach which Local Authorities should adopt with regard to the protection, enhancement and management of green infrastructure, priority habitats and ecological networks, and the recovery of priority species.

6.2.5. Paragraph 118 of the NPPF comprises a number of principles which Local Authorities should apply, including encouraging opportunities to incorporate biodiversity in and around developments, provision for refusal of planning applications if significant harm cannot be avoided, mitigated or compensated for, applying the protection given to European sites to potential SPAs, possible SACs, listed or proposed Ramsar sites and sites identified (or required) as compensatory measures for adverse effects on European sites, and the provision for the refusal for developments resulting in the loss or deterioration of 'irreplaceable' habitats unless the need for, and benefits of, the development in that location clearly outweigh the loss.

6.2.6. National policy therefore implicitly recognises the importance of biodiversity such that with sensitive planning and design, development and conservation of the natural heritage can co-exist and benefits can, in certain circumstances, be obtained.

6.3. Local Policy

Local Development Framework

6.3.1. The Development Plan for Swale Borough comprises a number of documents prepared in accordance with statutory requirements. Within the Swale Borough the development plan will include the 'saved' Swale Borough Local Plan (2008) Policies, the emerging Swale Borough Local Plan (when adopted) and the Landscape Character and Biodiversity Appraisal Supplementary Planning Document (SPD).

Bearing Fruits 2031: Emerging Local Plan (April 2015)

6.3.2. Previously called 'The Core Strategy', this is Swale Borough Council's revised draft Local Plan and is a document that sets out the development plans and planning policies for the next 20 years. This plan was published in December 2014 and submitted for independent examination in April 2015, to be adopted in the spring of 2016. It includes a number of policies that relate to nature conservation, as laid out below.

6.3.3. **ST1 Delivering a Sustainable Development in Swale** explains the strategy for delivering national policies on sustainable development within the Local Plan for Swale. This includes the conservation and enhancement of the natural environment by, amongst other things, recognising within decision-making the benefits to society obtained from ecosystems and protecting and enhancing designated sites.

6.3.4. Other objectives of this policy include ensuring the support of biodiversity through generous levels of native landscaping of local provenance and achieving net gains in biodiversity by off-setting the impact of development by increasing greenspace and ecological networks.

6.3.5. **CP4 Requiring Good Design** states that development proposals will retain and create green corridors within and between developments for biodiversity, amongst other things. They should conserve and enhance biodiversity and the local environment by retaining trees where possible, particularly those that make an important contribution to, amongst other things, the biodiversity value of the site or the surrounding area, and should provide a high standard of locally native plant species and trees in the landscaping. Lastly, they should also provide features and management intended to encourage biodiversity.

6.3.6. **CP7 Conserving and Enhancing the Natural Environment – Providing for Green Infrastructure** requires development proposals to recognise and value ecosystems for the services they provide, protect the integrity of existing green infrastructure, minimise and mitigate impacts on European designated sites; make the enhancement of biodiversity their primary purpose and promote the expansion of Swale's natural assets and green infrastructure within new and existing developments by taking into account the relevant guidelines and management plans and guidance, Biodiversity Action Plans and Supplementary Planning Documents and achieving, where possible, a net gain in biodiversity.

6.3.7. **DM14 General Development Criteria** requires development proposals to respond to the constraints and opportunities posed from natural processes, conserve and enhance the natural environment, cause no significant harm to amenity and / or other sensitive uses or areas.

6.3.8. **DM19 Sustainable Design and Construction** puts forward that developments should incorporate a demonstration of contribution to the network of green infrastructure and biodiversity, including through trees, green roofs and walls, soft landscaping and sustainable drainage systems, in accordance with policy CP7.

6.3.9. **DM27 Biodiversity and Geological Conservation** requires development proposals to conserve, enhance, extend and provide net gain for the biodiversity, minimise any adverse impacts and compensate where these impacts cannot be mitigated for.

6.3.10. It also states that developments should give weight to the protection of internationally, nationally and locally designated sites, provide compensatory measures where significant harm cannot be avoided and actively promote the expansion of biodiversity within the development design, in accordance with CP7.

6.3.11. **DM28 Woodlands, Trees and Hedges**, encourages developments to maintain and enhance these habitats by supporting small scale developments which purposefully further the appropriate management of woodlands or old orchards.

6.3.12. It also states that the council will protect trees (including old orchards, hedgerows and scrub) and that development proposals will retain trees as far as possible, and encourages the provisions of additional new woodland, orchard, tree and hedge planting. The council will make use of Tree and Hedgerow Protection Orders where applicable, where the removal of these would have a significant impact on the local environment, and appropriate replacements will be necessary where removal is unavoidable.

6.3.13. **DM29 Enabling Development for Landscape and Biodiversity Enhancement** lays out conditions in which proposals that contravene previous policies will be permitted.

Swale Borough Local Plan February 2008 – Saved Policies

6.3.14. Under the Planning and Compulsory Purchase Act 2004, policies from the Swale Borough Local Plan 2008 were saved until February 2011. In 2010, following direction from the Secretary of State, and in conformity with this Act, the majority of these policies were saved until they can be replaced by policies in the Local Development Framework. These saved policies are considered below.

6.3.15. **SP1 Sustainable Development** states that development proposals should accord with the principles of sustainable development and should, amongst other things, avoid detrimental impact on the welfare of areas of environmental importance, and generally minimise their impact upon the environment.

6.3.16. **SP2 Environment** requires that development proposals protect special features of the environment, including ecological features, by avoiding adverse environmental impact where possible and, if necessary, minimising, mitigating and compensating for these impacts.

6.3.17. **E10 Trees and Hedges** declares that the Council will protect trees on proposed development sites that make an important contribution to amenity, historic, landscape or nature conservation value of the site or the surrounding area. It also states that developments should retain trees wherever possible and provide new planting.

6.3.18. In this policy 'Trees' includes old orchards, fruit trees, hedgerows, woodland and scrub.

6.3.19. **E11 Protecting and Enhancing the Borough's Biodiversity and Geological Interests** encourages developments to conserve or enhance the biodiversity of the local area and discourages developments that have an adverse impact on biodiversity interests. These developments will only be permitted if there is an overriding need for the development; there is no reasonable alternative site for the development; adequate mitigation measures are put in place and appropriate compensation measures are undertaken by the developers in accordance with best practice.

6.3.20. **E12 Sites Designated for their Importance to Biodiversity and Geological Conservation** protects designated sites, statutory sites in particular, against development and its adverse impacts.

6.3.21. These policies will be superseded by the policies in the emerging Local Plan, as set out above, when it is adopted.

Landscape Character and Biodiversity Appraisal SPD September 2011

6.3.22. This Supplementary Planning Guidance document is part of the Local Development Framework and has replaced the Swale Landscape Character and Biodiversity Appraisal SPD (2008). It provides guidance and insight in designing landscapes and incorporating biodiversity into development designs. Although not given the same status as DPDs, it is likely this document would be given material consideration in determining planning applications. This document has been given due regard whilst formulating the recommendations in this report.

6.4. Discussion

6.4.1. It is considered that this development, following the recommendations in this report, would fully accord with national and local policy and will avoid any significant impacts on any designated sites for nature conservation. The potential presence of protected species is acknowledged and measures to safeguard these put forward, where necessary, whilst those habitats of ecological importance have been identified and measures recommended to ensure their protection.

7. SUMMARY AND CONCLUSIONS

7.1. Ecology Solutions was instructed by Milliken and Company on behalf of Shepherd Neame in November 2015 to undertake an updated ecological assessment of the site at Queen Court Farm, Ospringe, Faversham, Kent.

7.2. The proposals for the site comprise new residential buildings with associated hardstanding and amenity planting and the demolition of existing farm buildings.

7.3. The site is bounded to the north mainly by Mutton Lane and residential housing beyond and to the east, south and west mainly by agricultural land, with a farm house and agricultural buildings adjacent to the southern boundary and Water Lane immediately adjacent to the western boundary.

7.4. The site comprises mainly agricultural buildings and associated hardstanding, semi-improved grassland, tall ruderal, scrub and trees with a compost heap, a former hedgerow and areas of recolonising ground.

7.5. The site was subject to Phase 1 habitat surveys, as well as specific surveys for bats, Badger and Barn Owl in March 2011 and also in January 2016. A desk-based study was also undertaken.

7.6. **Statutory Sites.** There are no statutory designated sites of nature conservation interest within the site. The nearest statutory designation is the Swale Estuary Proposed Marine Conservation Zone (MCZ), located approximately 1.45km to the northeast of the site. Swale Ramsar Site, which is also a Special Protection Area (SPA) and a SSSI, is located some 2km to the north of the proposed development site. Given the spatial separation, the existing intervening development and the lack of hydrological connections, it is not likely that there would be any direct adverse effects upon these designations as a result of the proposed development, during or after construction. Until such time as a Strategic Access Management and Monitoring (SAMM) Strategy is agreed, it is understood that an interim approach has been adopted by Swale Borough Council, in which a per-unit tariff is to be collected for developments of more than ten units within 6km as-the-crow-flies of an access point to the SPA.

7.7. **Non-statutory Sites.** There are no non-statutory designated sites of nature conservation interest within the site. The nearest such site is the Ospringe Valley Local Wildlife Site (LWS), situated approximately 0.7km to the west of the site. Information received as part of the desk study is that it is of particular interest for its ancient broadleaf woodland. This site is separated from the development site by extensive agricultural land. Given this separation it is not likely that there would be any significant adverse effects as a result of the development.

7.8. A number of additional statutory and non-statutory sites and Ancient Woodland sites are located in the wider area as identified on Plan ECO1, but no significant adverse effects are anticipated.

7.9. **Habitats.** It is recommended that, where possible, any retained areas of grassland are over-sown with a native wildflower seed mix in order to increase the floristic diversity of the site and that the trees are retained. The loss of scrub areas should be mitigated by designing a landscape plan based on native species and, where possible, of local provenance, with an emphasis on hedgerows and shrubs. This would contribute to maintain and enhance the wildlife corridors throughout the site and also help prevent the spread of non-

native species into the surrounding countryside. The use of native fruit-bearing species would enhance the foraging opportunities for a range of species, including birds and small mammals.

7.10. **Invasive Species.** A stand of Japanese Knotweed *Fallopia japonica* is present on the northwest corner of B8. It is approximately 5m by 3m. Another much larger stand is located offsite to the west of B8, adjacent to the semi-improved grassland. Japanese Knotweed is an invasive species which is particularly invasive. It is recommended that a contractor specialising in Japanese Knotweed is commissioned to carry out the removal and eradication of this species and that a guarantee, of at least 10 years, is sought for the eradication exercise given the persistent nature of this species.

7.11. Buddleia *Buddleja davidii* was also recorded on site. Where works are proposed within or close to the boundary vegetation all reasonable measures should be taken to prevent the spread of this plant species.

7.12. **Protected species.** Four trees within the site present good potential for roosting bats. These contain splits, cracks and woodpecker holes. The former hedgerow and scrub on site present some limited opportunities for foraging and commuting bats, although richer opportunities are available in the immediate vicinity of the site and the wider local area. A barn adjacent to the southern border of the site presents signs of use by bats and has overall very good potential for roosting bats.

7.13. It is understood that the trees to the east of SI2, including those presenting suitable roosting bat potential, are to be retained as part of the development proposal. If these were to be proposed for removal, further work would be recommended.

7.14. It is recommended that any lighting within the site is directed away from the retained scrub and trees and also the barn to the south of the site. Where possible, low pressure sodium lights, with hoods to direct light downwards, should be used in order to reduce light spillage. It is also recommended that bat boxes be placed on the trees to provide additional roosting opportunities and enhance the biodiversity value of the site.

7.15. No setts (active or inactive) are present within or immediately adjacent to the site. The scarcity of tracks and signs indicate the site is not significantly used by Badgers, but its occasional use cannot be fully excluded.

7.16. The removal of suitable nesting habitat should be completed outside the nesting bird season (March to July inclusive). It should only be removed during this period after a survey by an experienced ecologist has confirmed the absence of any active nests to avoid a possible offence.

7.17. Given the presence of a small amount of apparently suitable reptile habitat within the site, strimming of the grassland from west to east during the active season is recommended to persuade any reptiles that would be present to move away of their own accord.

7.18. The provision of a pond, as indicated in the development proposals, would enhance the site for amphibians. It is advised that this feature be planted with native species which would increase its value and provide cover for wildlife.

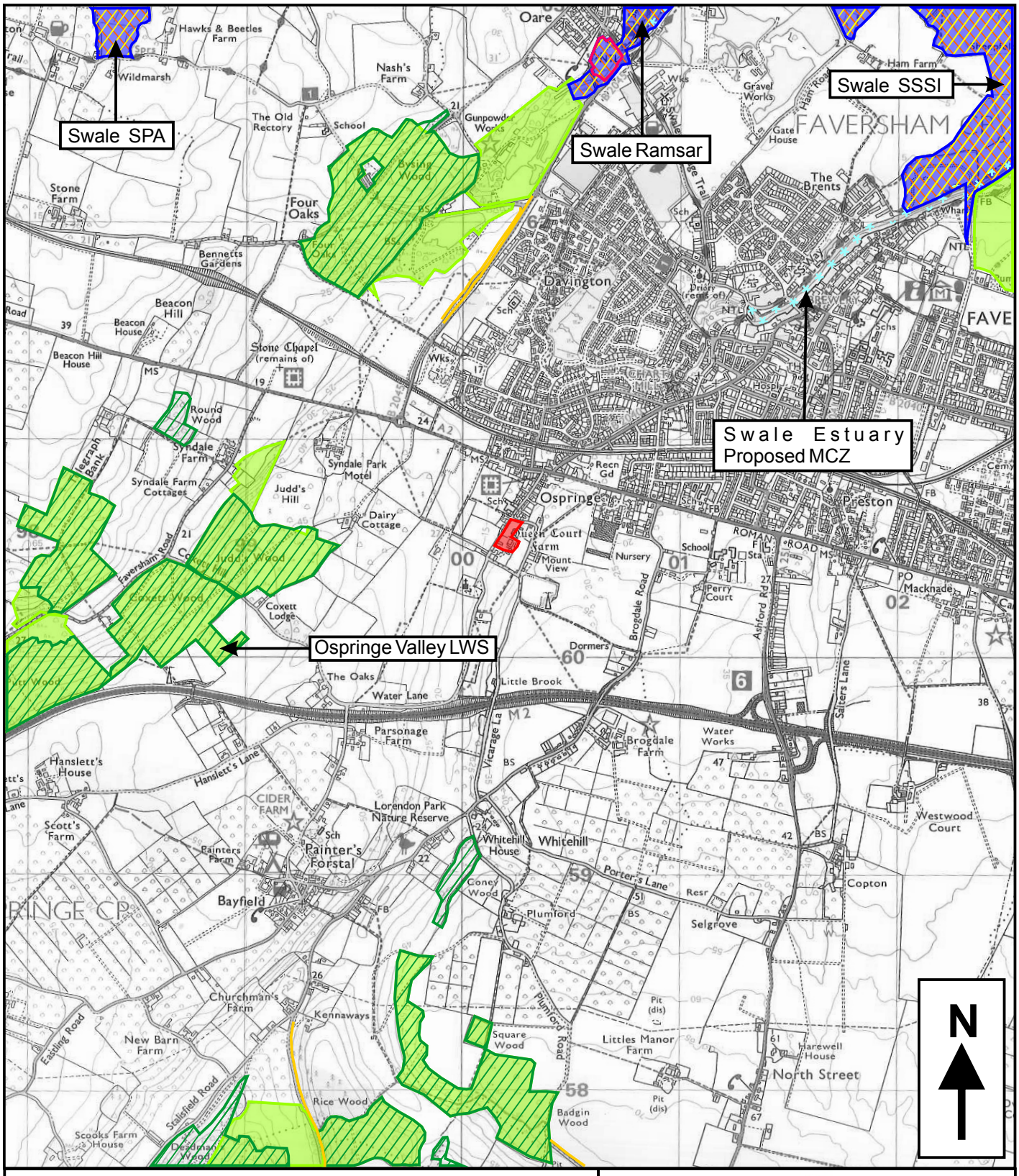
7.19. It is recommended that dead wood piles should be placed within the site, particularly towards the eastern side of the semi-improved grassland field SI2 to encourage the use of the site by Stag Beetles. This would also increase the overall invertebrate diversity of the site.

7.20. In conclusion, it is considered that all relevant ecological issues have been addressed and, following the implementation of the mitigation measures and recommendations set out in this report, there is no overriding ecological constraint and the proposals for the site, would accord with planning policy with regard to nature conservation on all administrative levels.

PLANS

PLAN ECO1

Site Location and Ecological Designations



KEY:

- SITE LOCATION
- RAMSAR SITE
- SPECIAL PROTECTION AREA (SPA)
- SITE OF SPECIAL SCIENTIFIC INTEREST (SSSI)
- PROPOSED MARINE CONSERVATION ZONE (MCZ)
- KENT WILDLIFE TRUST RESERVE (KWT)
- LOCAL WILDLIFE SITE (LWS)
- ROADSIDE NATURE RESERVE (RNR)
- ANCIENT WOODLAND

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PLAN ECO1: SITE LOCATION AND ECOLOGICAL DESIGNATIONS

PLAN ECO2

Ecological Features

H1
B1
B2
B3
B4
B5
B6
B7
B8
B9
SI1
SI2

KEY:

- SITE BOUNDARY
- AMENITY PLANTING
- RECOLONISING GROUND
- SCRUB
- TALL RUDERAL
- AMENITY GRASSLAND
- SEMI-IMPROVED GRASSLAND
- WOODLAND
- COMPOST HEAP
- HARDSTANDING
- BUILDINGS
- JAPANESE KNOTWEED
- HEDGEROW
- TREE
- TREE WITH BAT POTENTIAL
- CONIFEROUS TREE
- POND

N

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PLAN ECO2:
ECOLOGICAL FEATURES

PHOTOGRAPHS

PHOTOGRAPH 1: Overview of site buildings

PHOTOGRAPH 2: Building B1

PHOTOGRAPH 3: Interior of building B2

PHOTOGRAPH 4: Interior of building B4

PHOTOGRAPH 5: Building B3

PHOTOGRAPH 6: Semi-improved grassland SI2

PHOTOGRAPH 7: Habitats behind building B8

PHOTOGRAPH 8: Trees and scrub next to SI1

PHOTOGRAPH 9: Split and holes in tree next to SI2

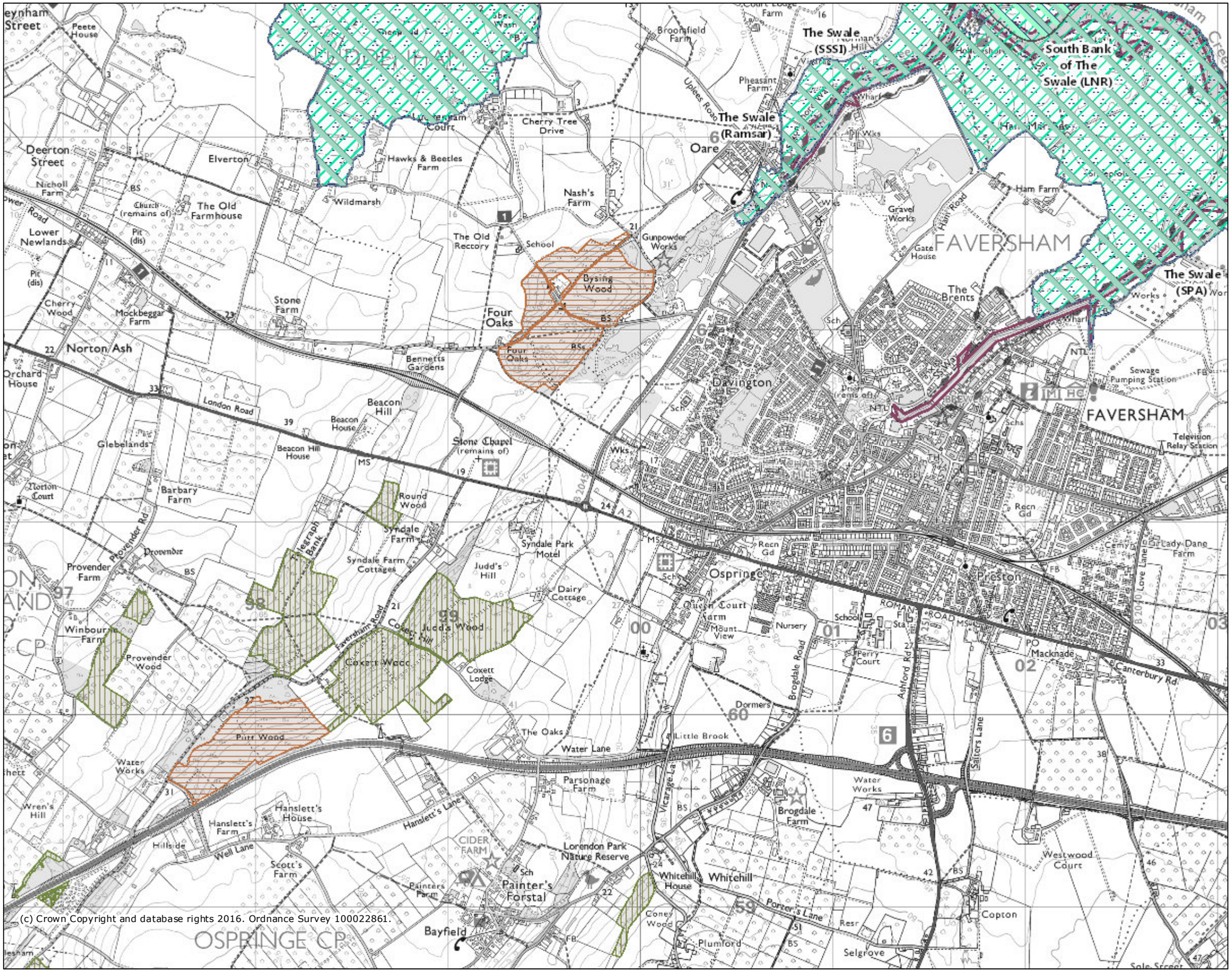
PHOTOGRAPH 10: Japanese knotweed next to building B8

APPENDICES

APPENDIX 1

Information downloaded from MAGIC

6956 Queen Court Farm



Legend

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

Ancient Woodland (England)

- Ancient and Semi-Natural Woodland
- Ancient Replanted Woodland

Projection = OSGB36
xmin = 594800
ymin = 158600
xmax = 604900
ymax = 163800
Map produced by MAGIC on 24 March, 2016.

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