Betteshanger Biodiversity: An Analysis of the Ecological Appraisal

by Sue Sullivan for the Friends of Betteshanger June 2020

Summary

This report relates to the proposed development at Betteshanger (planning application 20/00419. Address. Almond House, Betteshanger Sustainable Parks, Sandwich Road, Sholden CT14 0BF) A proposed development of 200 houses and associated development on the old colliery site at Betteshanger, has been submitted for outline planning permission to Dover District Council. An Ecological Appraisal by Aspect Ecology was submitted by Quinn Estates as part of the planning application.

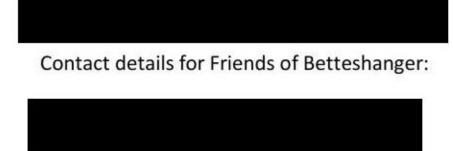
At a time of unprecedented declines in habitats and species it is paramount that biodiversity is considered and protected. Knowing that much of the Betteshanger site has been rewilding for the past 30 years, I have conducted an analysis of the Ecological Appraisal submitted by Quinn Estates to see whether the habitat and wildlife on the site had been properly taken into account.

The Conclusion of this analysis was that the Ecological Appraisal was not fit for purpose, for the following reasons:

- Section 5.1 The Ecological Appraisal by Aspect Ecology does not fully adhere to the Dover District Council Local Requirements: Biodiversity and Geological Conservation 2013
- Section 5.2 The Appraisal does not fully conform to the requirements of the National Planning Policy Framework (NPPF) on habitats and biodiversity.
- Section 5.3 The Appraisal does not recognize and contribute to emerging Government policy on the Natural Environment as set out in the Environment Bill Summer Policy Statement July 2019.
- Section 6 The Appraisal does not fully adhere to the Standing Advice from Natural England Protected species: how to review planning applications.
- Section 6.1 The conclusions of the Appraisal are based on an unsuitable survey.
- Section 6.2 The survey was carried out at the wrong time of year.
- Section 6.2 The conclusions of the Appraisal, on the ecological interest of the site are currently based on surveys that found only 9 common flower species, 18 tree species and 37 bird species.
- Section 6.2 The East Kent Wildlife Group have recorded over 100 different bird species on the site including Red Listed species) and the Kent Botanical Recording Group have recorded 180 vascular plants(including rare and Red listed species) Their reports (see Appendix 1and 2) are a much more reliable indication of the biodiversity value of the site.

- Section 6.3 and 6.4 The Appraisal does not provide sufficient information to allow Planning officers and the Planning committee to assess the effects of the proposed development on protected and priority habitats and species. Thus, they are not able to fulfil their statutory duty under the terms of the Natural Environment and Rural Communities Act 2006
- Section 7 and 8 There are serious omissions in relation to habitat and species.
- Section 7 and 11 Conclusions are drawn that are not justified by the content of the Appraisal.

About the Author: Sue Sullivan was invited to carry out an analysis of the ecological appraisal by the Friends Of Betteshanger. She has lived in East Kent all of her life and grew up in a local farming family. She has a life-long interest in ecology and the natural world.



1. Introduction

This analysis shows that the ecological value of the site proposed for development has not been properly assessed and that the Ecological Appraisal by Aspect Ecology (see reference 1) and submitted with Quinn Estates for the proposed development at Betteshanger is not fit for purpose.

Given the alarming declines in U.K. wildlife and the Government's ambitions in its 25-year Environment Plan to leave the environment in a better state than found, ecological appraisal and surveying in respect of planning applications needs to be of the highest standards. The baseline appraisal needs to provide a true picture of the ecological value of the proposed development site, with detailed assessments of both protected and priority species and the effect or likely effect that the development would have on them. It then needs to detail how these effects on species will be avoided, mitigated or compensated for, according to the requirements of the National Planning Policy Framework (23).

This has not been achieved in the Ecological Appraisal by Aspect Ecology. There are major flaws, omissions and timing faults and the conclusions reached are often not justified by the content of the Appraisal.

Dover District Council Planning Officers and Committee need to have sufficient and correct information on the biodiversity of the site if they are to be confident that their legal and other responsibilities towards biodiversity are implemented when considering this planning application. This is entirely dependent on the quality of the Ecological Appraisal and surveys that Quinn Estates and Aspect Ecology submit.

2. Biodiversity at Betteshanger: Why does it matter?

2.1 Global context

"We are pushing our planet to the brink. Human activity – how we feed, fuel and finance ourselves – is taking an unprecedented toll on wildlife, wild places and the natural resources we need to survive.....On average we've seen an astonishing 60% decline in the size of populations of mammals, birds, fish, reptiles and amphibians in just over 40 years....We're facing a rapidly closing window for action and the urgent need for everyone – everyone – to collectively re-think and re- define how we value, protect and restore nature."

From The Living Planet Report 2018 by World Wildlife Fund (2)

2.2 National Context

The U.K. is not immune. The "State of Nature Report 2019" (3) shows that our wildlife is in serious trouble too. This report is compiled by 70 different organisations involved in research and conservation of the natural world in the U.K. The 2019 Report shows that:

- 41% of species studied have declined in abundance since the 1970's. Over the past 10 years
 44% of species have declined.
- 15% of species are threatened with extinction.
- Butterfly abundance is down by 16%.
- Moth abundance is down by 25%.
- 26% of mammals are at risk of extinction.
- Farmland birds such as grey partridge, tree sparrow and turtle dove down by over 90 %.

Statistics are drawn from "Assessing The State of Nature in the UK" By Butterfly Conservation (4) and an analysis of the "State of Nature Report 2019" from the Mammal Society (5)

These losses matter as they represent the unravelling of the web of life upon which we all depend.

2.3 Local Context

Like the rest of the UK, East Kent is seeing increasing amounts of development and the number of wild green spaces for both people and wildlife is steadily diminishing. This report is concerned with the site at Betteshanger which is now the subject of outline planning application for over 200 houses and associated development by Quinn Estates. Much of this site has been re-wilding for 30 years since the Betteshanger colliery closed down in the 1980s.

In 2002 an Ecological Impact Assessment was carried out on behalf of SEEDA on the whole Betteshanger site (colliery site and Betteshanger Park) as part of the Coalfield Regeneration Scheme. In "Betteshanger Colliery Regeneration. Nature Conservation Management Plan" (24), it says in section 3.12 that "The ecological value of the site is relatively rich." It identifies 13 key habitats including two of National/County importance; Bare and Ephemeral Plant Communities, and Lichen Heath. As well as bats of County importance, Reptiles of County importance and Terrestrial Macro Invertebrates of National importance. Because of the invertebrate interest, the site was considered eligible for Site of Special Scientific Interest (SSSI) designation. This gives an indication of how important the current proposed development site may be for biodiversity. The regeneration by SEEDA resulted in thousands of native trees being planted on the site and flat areas created for commercial development. This didn't materialise and the re-wilding continued. Now its future as a long-standing refuge for wildlife and a quiet green space for people is in jeopardy.

3. The Ecological Appraisal by Aspect Ecology

This was commissioned by Quinn estates for the development at Betteshanger Planning application number 20/00419 and compiled by Aspect Ecology (1). It was carried out in November 2018 and the desk top data was researched in 2017. The purpose of the Appraisal is to 'establish the ecological interest of the site and provide an appraisal of the likely ecological effects of the proposal.'

4. Analysis of the Ecological Appraisal

This analysis shows that:

- The "Ecological Appraisal" by Aspect Ecology does not fully adhere to the Local Requirements on Biodiversity as set out by Dover District Council (6)
- The Appraisal does not recognise and contribute to emerging Government policy on the Natural Environment as set out in the "Environment Bill, Summer Policy Statement. July 2019" (7).
- The Appraisal does not fully conform to the requirements of the "National Planning Policy Framework" (NPPF) on habitats and biodiversity.
- The Appraisal does not fully adhere to the "Standing Advice" from Natural England (8).
 Protected Species: how to review planning applications.
- The conclusions of the Appraisal are based on an unsuitable survey.
- The survey was carried out at the wrong time of year.
- The Appraisal does not provide sufficient information on habitats and species to allow Planning officers and the Planning committee to assess the effects of the proposed development on protected and priority species. Thus, they are not able to fulfil their statutory duty under the terms of the "Natural Environment and Rural Communities Act 2006" (9).
- There are serious omissions in relation to habitat and species.
- Conclusions are drawn that are not justified the content of the Appraisal.
- The purpose of the Appraisal "To establish the ecological interest of the site and provide an appraisal of the likely ecological effects of the proposals" has not been met.

This report now considers each of these points, in turn, as follows.

5. The Appraisal and Local and National Requirements

5.1 Local Requirements

The Ecological Appraisal has not complied with the "Local Requirements - Biodiversity and Geological Conservation" from Dover District Council 2013 (6) in the following ways:

- The required surveys have not been carried out according to the criteria and indicative triggers.
- The initial survey was carried out at the wrong time of year.
- The survey wasn't to an appropriate level of scope and detail.
- The survey didn't record which species are present nor identify their numbers.
- Alternative designs or locations have not been considered.
- It has not been shown that adverse effects will be avoided wherever possible
- There is no assessment of how species numbers are likely to change after development.

5.2 National Requirements: National Planning Policy Framework

Section 175 of the NPPF establishes a set of principles to be used by Planning Authorities to protect biodiversity:

- Avoidance
- Mitigation
- Compensation

Avoidance of harm should be considered first and if this is not possible suitable mitigation measures should be designed. Compensation should only be used as a last resort.

I see no evidence in the Appraisal that avoidance has been properly considered.

Natural England in: "Protected Species: How to View Planning Decisions" says:

"When it isn't possible to avoid affecting species applicants must have a mitigation strategy to:

- *remove or reduce the negative effects of their proposal
- *show how they will carry out risk reduction measures"

Again, the advice is that avoidance should be considered first.

5.3 National Requirements: Emerging Government Policy

In the "Environment Bill Summer Policy Statement July 2019" (7) It states:

'Across Government we are committed to be the first generation to leave our environment in a better state than we found. The Environment Bill is the centerpiece of our answer to urgent environmental need and a landmark commitment to protecting and improving the environment for future generations.'

And:

'Through the bill we will introduce a mandatory approach to biodiversity net gain. This will require developers to ensure habitats for wildlife are enhanced with a 10% increase in habitat value for wildlife compared with the pre – development baseline.'

There is no mention of emerging Government policy in the Ecological Appraisal and no commitment to a 10% net gain in habitat value.

6. The Appraisal and Natural England Requirements

Natural England's Standing Advice for Local Planning Authorities has not been fully met:

In "Protected species: How to Review Planning Applications" (8), Natural England advises that:

"You can refuse planning permission or ask for a survey to be redone if:

- It isn't suitable
- It is carried out at the wrong time of year.
- You don't have enough information to assess the effect on a protected species."

The Ecological Appraisal does not meet these requirements as shown in the following sections.

6.1 Is the survey suitable?

In Appendix 5805/3 of the Ecological Appraisal it says:

"The approach taken in this report is based on that described in the Chartered Institute of Ecology and Environmental Management's (CIEEM) Guidelines for Ecological Impact Assessment in UK and Ireland 2016."

This should not be taken to mean an Ecological Impact assessment has been carried out. It has not. Aspect Ecology have carried out an extended Phase 1 habitat survey with the addition of some phase 2 survey work and commentary on ecological features and faunal use of the site. In their "Handbook For Phase 1 Survey" (10) the JNCC (Joint National Conservation Committee) warns thus on P21:

"Surveyors should make clear the limited nature of the information used in the assessment. Phase 1 survey is rapid and fairly superficial, and the single visit may have been carried out at a less than ideal time of year."

And:

"A Phase 1 survey is a habitat survey based on vegetation. No attempt is made to construct complete species lists and rarities may have been overlooked."

CIEEM in their guidelines on ecological impact assessment give the same verdict and show that a baseline assessment is not suitable to be submitted with a planning application. This is what they say in section 3.14 (p12 of "Guidelines for Preliminary Ecological Appraisal 2017" (11)):

"Under normal circumstances it is not appropriate to submit a Preliminary Ecological Appraisal Report (PEAR) because the scope of a PEAR is unlikely to fully meet Planning Authorities requirements in respect of biodiversity and implications for protected species. This is because a PEAR is normally written to advise a client of ecological restraints and opportunities to inform their design options, likely mitigation requirements and the need for further surveys. It therefore lacks a detailed assessment of ecological effects and commitment to mitigation. The Planning Authority is therefore unlikely to have adequate information to enable the decision maker to determine the application lawfully."

Given that the desk top data was collected in 2017 and the Appraisal carried out in 2018, we can conclude that it was indeed prepared for Quinn Estates and wasn't written specifically for the planning application.

This is contrary to the advice from CIEEM and contrary to Natural England's requirement that the survey should be "suitable".

6.2 Was the survey carried out at the wrong time of year?

The initial Ecological Appraisal was carried out in November of 2018. The Joint Nature Conservation Committee in section 2.6 p11 of their "Handbook for Phase 1 Habitat Survey" (10) say:

"Select to survey in Spring and Summer those areas most rich in woodland, to survey in midsummer those areas most likely to have semi natural grasslands.....it may be possible to carry out some survey in November ...such end of season survey should be restricted to checking areas surveyed earlier and it must be pursued with caution since many plant species will no longer be apparent."

In section 4.11 of the Appraisal, Aspect ecology say that they found no evidence of the presence of protected or priority species plants in their survey in November 2018 even though desktop data from KMBRC (Kent and Medway Biological Records Centre) indicated their presence. In section 4.5.2 of the Appraisal it shows that only 9 common species of plant were identified on the site by Aspect Ecology.

However, in June 2020 the Kent Botanical Recording Group (12) (Appendix 1) found over 180 vascular plants on the site including:

- A schedule 8 plant protected under the Wildlife and Countryside Act 1981 and categorised as Endangered.
- 9 plants categorised as Rare in Kent.
- 20 Kent axiophyte plants indicators of habitat that is important for conservation.
- 5 plant species Near Threatened or above on the England or UK Red Data List (section 41 species)

Some of these plants were found on the main development platforms that Aspect Ecology "consider(s) unlikely to qualify as an important ecological feature and their loss is likely to be of low ecological significance" (see 4.54 of the Appraisal). This is clearly not the case.

Because Aspect Ecology carried out the Ecological Appraisal in November assessment of species composition in this case was compromised (It will also have compromised the species composition assessment in all the other habitat types identified) so the conclusion in section 2.41 of the Ecological Appraisal that (the survey allowed) 'for an adequate assessment of the intrinsic ecological

value of the site to be made' cannot be relied upon. The content of the Appraisal does not justify these conclusions.

Section 41 of the Natural Environment and Rural Communities Act 2006 (NERC) lists the habitats and species that have been designated to be "of principal importance of conserving biodiversity" as they are those that are most threatened. They are also known as priority species and habitats. See following section.

6.3 Section 41 and the Natural Environment and Rural Communities (NERC) Act 2006

In the Appraisal, scant attention has been paid to section 41 species and habitats as set out in the NERC act (9).

This explanation of section 41 requirements is taken from "Natural England – Standing Advice for Protected Species 2011" (13):

In Section 3.11 it states:

"Section 41 of the NERC Act requires the Secretary of state to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England."

In Section 3.12 it goes on:

"The section 41 list is used to guide decision makers such as local and regional authorities in implementing their duty under Section 40 of the NERC Act to have regard to the conservation of biodiversity in England, when carrying out their normal functions."

Section 3.13 states:

"Where one or more of these species (as listed in section 41 of the NERC Act) could be affected by a planning proposal Natural England recommends that surveys and mitigation for impacts are secured from the applicant prior to a decision being taken."

In Section 3.14 it states:

"Such measures may assist Local Authorities in evidencing that they are fulfilling their duty under Section 40 of NERC"

This shows the vital importance of assessing and surveying for the presence of priority species and habitats and, when complied with by the developer, allows planning Officers and the Planning Committee to fulfil their legal duty to have regard for the conserving of biodiversity, when coming to a decision about a planning application.

6.4 Is there enough information for the Planning Officers and the Planning Committee to assess the effect on a protected or priority species (section 41 species)?

Dover District Council's Local Requirements call for surveys to be completed for the following proposals:

- Proposals affecting woodland, or field hedgerows and/or lines of trees require surveys for bats, breeding birds, dormouse, badger, plants, Section 41 priority species.
- Major proposals within 500m of a pond require surveys for great crested newt and section 41 priority species.
- Proposals affecting or within 200m of rivers, streams, lakes or other aquatic habitats require surveys for bats, breeding birds, otters, water vole, amphibians, plants and section 41 priority species.
- Proposals affecting derelict land and/or previously developed land (brownfield sites) require surveys for breeding birds, great crested newts, badgers, reptiles, amphibians, plants, section 41 priority species.

The survey work completed and promised by Quinn estates and Aspect Ecology falls short of the scope and detail that these Local Requirements specify. Besides the initial Appraisal, the need for surveys for bats, great crested newts, water voles, reptiles, and plants has been indicated by Aspect Ecology.

Will these be carried out and will they be to the required standard? Surveys for amphibians and wintering birds are required but have not been promised. And what about beavers that have been reintroduced into Ham Fen? Also, there is no evidence that section 41 species will be surveyed for as specified in the Local Requirements. There is a downplaying in the Appraisal of the importance of priority species as set out in Section 41 of NERC. Although the site is acknowledged as being suitable for hedgehog, brown hare, harvest mouse and toad (all section 41 species) there is no plan to survey for these species even though hedgehogs, for example, are thought to have declined by a third in the past 10 years. Why is there no plan to survey for these animals? The surveys carried out by Kent

Botanical Recording Group and the East Kent Wildlife Group show the presence of protected and priority species. How are effects on these species going to be avoided? The 2002 Ecological Impact Assessment (EcIA), carried out as part of the Coalfield Regeneration Scheme (by SEEDA), showed that the Betteshanger sites were of National Importance for Terrestrial Macro Invertebrates and eligible for SSSI status. It is widely acknowledged by Government and Natural England that brownfield sites can be of exceptional importance for invertebrates. Why is no survey planned for invertebrates at Betteshanger?

Until these issues surrounding surveys are remedied, the Planning Officers and Committee do not have enough information to assess the current biodiversity value of the site nor to judge the effects of the proposed development on priority and protected species.

7. Further Omissions in the Appraisal

This section highlights serious omissions in relation to:

- Open Mosaic Habitat on Previously Developed Land (a priority habitat) I
- Invertebrates
- · Plant communities.
- Lichen Heath

The following sections 7.1 to 7.4 examine each of these in turn.

7.1 Open Mosaic Habitat On Previously Developed Land

In section 4.3.2 on Habitats and Ecological Features, hedgerows, deciduous woodland, ponds and lowland fen are the only habitats that Aspect Ecology consider 'to potentially qualify as priority habitats and therefore may constitute Important Ecological Features.'

In section 5.1 there is a serious omission, as Aspect Ecology hasn't surveyed for Open Mosaic Habitat on Previously Developed Land, a priority habitat under Section 41 of the Natural Environment and Rural Communities Act 2006 (NERC).

In the Government's latest advice on the Natural Environment (14) last updated 21 July 2019 it says under "How can brownfield land of high environmental value be taken into account?":

'Some previously developed, or 'brownfield' land is of high environmental value providing habitats for protected and priority species and other environmental and amenity benefits. When allocating land for development or determining a planning application the biodiversity....value of the land and its environmental sensitivity will need to be taken into account so that harm can be avoided, mitigated or compensated for in a way which is appropriate given the site's identified value."

Natural England in its Open Mosaic Habitat (Draft) (15) suggests information from Buglife is a useful source of information on Brownfield sites. Buglife's Introduction to Brownfields (16), tells us that:

- Over 30 priority species are strongly associated with brownfields
- On Thames estuary brownfields alone, 100 Red Data and 400 nationally scarce and rare species have been recorded
- At least 40 invertebrate species are largely or wholly confined to brownfields.
- They can also support an exceptional variety of flowering plants and be a valuable source of pollen and nectar for insects.

The Open Mosaic brownfield priority habitat is unique in that it represents a mosaic of habitats in an area defined by previous land use rather than a single habitat. Thus, a Phase I habitat survey is unsuitable as its function is to identify individual habitat according to its vegetation. A specific survey method is needed to survey for Open Mosaic Habitat on Previously Developed Land (such as the Open Mosaic Survey Handbook (17) disseminated by Buglife or use of the DEFRA criterion in Open Mosaics on Previously Developed Land (UK BAP Priority Habitat Descriptions) (18)

Aspect Ecology doesn't acknowledge the potential value of Betteshanger as a brownfield site nor its potential as an important ecological feature for invertebrates and plants. Neither does it indicate any willingness to survey for Open Mosaic Habitat on Previously Developed Land even though the site meets all the DEFRA criteria.

The DEFRA Criteria for Open Mosaic Habitat (18) are as follows:

- 1. The area of open mosaic habitat is at least 0.25ha in size.
- Known history of disturbance at the site or evidence that soil has been removed or severely modified by previous use(s) of the site. Extraneous materials/ substrates such as industrial spoil may have been added.
- The site contains some vegetation. This will comprise early successional communities consisting mainly of stress tolerant species (e.g. indicative of low nutrient status or drought)
- 4. Early successional communities are composed of a) annuals, b) mosses/liverworts, c) lichens, or d) ruderals, or e) inundation species or f) open grassland, or g) flower rich grassland or h) heathland
- 5. The site contains unvegetated, loose, bare substrate and pools may be present.
- The site shows spatial variation forming a mosaic of one or more of the early successional communities a-h above (criterion 4) plus bare substrate with 0.25 ha.

The lack of survey for OMHPDL is a serious omission which should be challenged, as the ecological interest of the site cannot be properly ascertained until this is carried out.

7.2. Invertebrates

It is widely acknowledged that brownfield sites can be exceptionally important for invertebrates. Buglife recommends in its "Introduction to Brownfields" that all high-quality brownfield sites should have a full invertebrate survey. Buglife resources are recommended by Natural England in its Open Mosaic Habitat (draft) document.

In its "Good Planning Practice for Invertebrate Surveys" (19) Buglife lists habitats that alone or in combination, should trigger an invertebrate study. These habitats are:

- Previously developed or brownfield land (this applies to the whole Betteshanger site)
- Areas of flower rich grassland (also present at Betteshanger)
- Scrubland, hedgerows and scrubby grassland (also present at Betteshanger)
- Mosaics and combinations of these habitats (also present at Betteshanger) Buglife says these can be exceptionally important for invertebrates.

Natural England in "Invertebrates: surveys and mitigation for development projects" (20) says:

"invertebrates exist in all habitats but certain habitat types are of very high value and should be considered in survey plans. These include....open mosaics and previously developed brownfield land."

Despite there being a general acceptance among conservationists of the importance of brownfield sites for invertebrates Aspect Ecology plays down the likely importance of the site for creatures such as bees, butterflies, wasps, beetles and flies. This is what they say in section 5.11.4 of the Appraisal:

...."parts of the site do support a more varied habitat mosaic....such areas may support a more varied invertebrate assemblage of importance at the local level, although these areas are largely retained under the proposals such that significant losses of invertebrate habitat would not occur under the proposals."

So, there is the recognition that invertebrate assemblages may be present. The word 'may' indicates that no survey has been undertaken to ascertain the level of importance of such assemblages. Despite this the level of importance has been judged to be local. This conclusion cannot be relied upon because no invertebrate has been carried out.

There will be loss of invertebrate habitat under the proposals but without knowing what species are present. This is presented as if it is an acceptable loss. Again, this conclusion cannot be relied upon.

Historical records show that it is possible that nationally important invertebrates, particularly spiders and beetles are present as indicated in the EcIA carried out on the Betteshanger sites in 2002. It is likely that section 41 species are present: On May 20th I saw a small heath butterfly (a section 41

species) on land by Almond House. The Make a Buzz Project (a project ongoing in Kent for Bumble Bee Conservation Trust) has found 3 rare bees (all section 41 species) in the area surrounding Betteshanger: the Moss Carder, the Red Shanked Carder and the Ruderal. A local moth enthusiast has said it is likely that the Bright Wave moth will be present as this moth has been found on 3 sites at Betteshanger Park. Butterfly conservation has advised that the Grizzled Skipper may be present. (Both of these are section 41 species)

This all adds up to an indication that an invertebrate survey is essential if the biodiversity interest of the site is to be accurately recorded and if the Planning Officers at Dover District Council and the Planning Committee are to have sufficient information to judge effects on protected and priority species. An invertebrate survey should be a requirement in this planning application and its omission is a serious failing.

7.3 Plant Communities

There are also omissions in respect of plant communities as Important Ecological Features.

The plant survey by the Kent Botany Recording Group shows that areas of the site including the main development platforms may well qualify as Important Ecological Features because of the plant assemblages, which are typical of species—poor communities. CIEEM (the Chartered Institute of Ecology and Environmental Management) lists the following as a contender for an Important Ecological Feature, "Plant communities that are considered to be typical of valued natural/semi natural vegetation types, including examples of species-poor communities"

It may also be that the Betteshanger site qualifies as a "habitat that is rare or uncommon" or a "habitat that (is) effectively irreplaceable". Both these are listed by CIEEM. p 23-24 "Guidelines for Ecological Impact Assessment in the U.K. and Ireland 2018" (21).

7.4 Lichen Heath

The site should be surveyed for Lichen Heath as found in the 2002 regeneration EcIA and classified as of National/County importance.

8. Further Issues With The Appraisal

In sections 8.1 to 8.4 I examine further issues concerning habitat and species.

8.1 Woodland and trees

In Section 4.6. The Ecological Appraisal identifies 4 main woodland blocks on the site, shown as W1, W2, W3, and W4, on Plan 5805/EC03 at the end of the Appraisal. W1 and W4 are both identified as priority habitats according to Natural England magic maps and acknowledged to be Important Ecological Features in 4.6.6 of the Appraisal.

Despite this it is proposed to remove some of W4 and much of W1, which is in the area proposed for housing just opposite the Ramsar/SSSI at the A258 end of the site. This amounts to 0.4 hectares of woodland in total and in the case of W1 this is also the area with the greatest concentrations of breeding bird territories including turtle doves, as shown on map in Plan 5805/EC04.

Removing priority habitat in this way is totally unacceptable especially as it would be easy to adjust the design plans and not site any buildings in this sensitive area.

This downplaying of the importance of priority habitats and priority species needs to be challenged and then remedied.

8.2 Scrub

In Section 4.7 on Scrub there is no proper recognition of its value as habitat. Scrub is not categorised as a priority habitat, but the scrub edge is often rich in flowering plants which provide nectar for bees and butterflies and seeds for birds. Tall herbs and grasses offer shelter for invertebrates and small mammals, nest sites for birds such as bullfinch (present at Betteshanger and a priority species) and hunting areas for owls and kestrels. Scrub is a very valuable habitat in its own right and major clearance would have a seriously detrimental effect on the wildlife on the Betteshanger site and should be avoided. Moreover, no picture of the biodiversity interest can be complete without knowing what lives in the scrub areas.

8.3 Birds

In Section 5.10 on Birds there is no evidence of a survey for wintering birds, as required by Natural England and Dover's Local Requirements, although 37 species of bird were recorded by Aspect Ecology in Spring 2018 including a number of priority species. (see Plan 5805/EC04 at the end of the Appraisal)

The East Kent Wildlife Group (22) has recorded over 100 bird species on the Betteshanger site, indicating the extent of its biodiversity interest (see Appendix 2). This Spring they identified the following Red Listed 'Birds of Conservation Concern' that are probably breeding on site: grey partridge, cuckoo, turtle dove, song thrush, mistle thrush and linnet.

They also identified 7 Amber listed birds also probably breeding on site: mallard, stock dove, kingfisher, dunnock, willow warbler, bullfinch and reed bunting.

The Red List indicates the birds of highest conservation concern needing urgent action. Turtle Doves and grey partridge have both declined by over 90 % and the turtle dove is considered to be the fastest declining bird in the UK.

As such these Red Listed birds should be seen as Important Ecological Features and protected accordingly.

Where is the evidence in the Ecological Appraisal that Red and Amber Listed birds will be suitably protected?

8.4 Badgers

Although Aspect Ecology found no active evidence of badgers during their survey in 2018, this year in February and March a local resident saw badgers in the big sett in woodland block W4. Badger activity was also seen on the south east boundary of the development site on 20th June 2020. This indicates a need for a further badger survey.

9. Mitigation

The little information that is given in section 6 of the Appraisal on mitigation relates largely to the construction phase of development and on the whole, it is advisory rather than a firm commitment by the developer to implement the measures. For example, in section 6.1.1 when describing a lighting system for the benefit of bats, the key factors suggested are for consideration only. The mitigation for reptiles, badgers and hedgehogs relates to the construction phase only. This is contrary to the DDC Local requirements as shown below.

With respect to birds which have been surveyed by Aspect Ecology, the Planning Officers and Committee should be aware that mitigation measures so far are not adequate and do not comply with Dover District Council's own Local Requirements. For example, in the bird survey carried out in 2018 turtle doves were found on the site. This is the UK's fastest declining bird and even though a turtle dove territory would be destroyed by the proposed development there is nothing to suggest how this negative effect is going to be avoided. This is totally unacceptable for a bird in danger of going extinct in the UK. And where are the efforts to avoid similar negative effects on the other priority bird species such as linnet, grey partridge and stock dove? With respect to woodland, why

should priority woodland block W1, which borders one of the most important areas for birds and is very close to the protected Ramsar/SSSI site, be destroyed? Surely, negative effects should be avoided by changing the design plans and not building in this area.

The Appraisal clearly shows that that there is no intention to consider or detail further mitigation measures at this stage, as they say in section 6.1.1 of the Appraisal:

"Further detailed mitigation strategy or method statements can be secured via suitably worded planning condition."

We would strongly object to this for a biodiversity- rich site like Betteshanger.

We want to see detailed and comprehensive surveys as specified in the Local Requirements. As well as avoidance and mitigation strategies for each protected and priority species available for public scrutiny on the Dover District Council Planning web site prior to a decision on this planning application.

Only when all of the surveys required by the Local Requirements are completed will avoidance and mitigation measures become meaningful.

The Local Requirements say the following under protected species survey and assessment:

'The Assessment must identify and describe potential development impacts likely to harm protected species and /or their habitats identified by the survey (these should include both direct and indirect effects both during construction and afterwards) Where harm is likely evidence must be submitted to show:

- · How alternative designs or locations have been considered
- How adverse effects will be avoided wherever possible
- How unavoidable impacts will be mitigated or reduced
- · How impacts that cannot be avoided or mitigated will be compensated'

These requirements have not been fully met.

10. Appraisal Purpose and Conclusions

In Section 1.3.1 of the Appraisal it states that the purpose of the report is to "establish the existing ecological interest of the siteand an appraisal of the likely effects of the proposal."

As my report has shown the Ecological Appraisal does not in any way establish the ecological interest of the Betteshanger site and there is very little information on the likely effects of the proposal on existing species, as so few have been found. The EcIA of 2002 gives a much more reliable indication of the site's potential ecological interest.

The ecological Appraisal concludes as follows in section 7.3:

"The phase 1 habitat survey has established that the site is dominated by habitats unlikely to be of ecological importance whilst the proposals have sought to retain those features identified to be of value including woodland and wetland."

This is an unsafe conclusion, as until you have enough information about protected and priority species within the habitats you cannot accurately judge the ecological importance. As an example, the Kent Botany Recording Group has shown that some of the very areas considered to be of low ecological value i.e. the main development platforms, in fact contain rare and protected species of plant.

Moreover, because no survey has been carried out for Open Mosaic Habitat it cannot be concluded that the site is "dominated by habitats unlikely to be of ecological importance."

Section 7.4:

"The habitats within the site provide opportunities to support protected species...accordingly a number of mitigation measures have been proposed to minimize harm to protected species."

Mitigation cannot be properly or effectively designed if you do not know which species are present and where. And surely according to all the advice avoidance should be the first consideration.

Section 7.5:

"In conclusion the proposals have sought to minimise impacts....and it is considered unlikely that the proposals will result in significant harm to biodiversity."

This is an astonishing conclusion and one that cannot in any way be justified by the contents of the Appraisal which tells us very little indeed about the species present on the site and which has serious omissions and is full of unsafe conclusions. Where is the evidence that the proposals will not result in significant harm?

11. My conclusion.

In conclusion I have shown that the Ecological Appraisal submitted by Quinn Estates with planning application 20/00419 is not fit for purpose:

It is not a suitable survey to submit with a planning application as it fails to show the biodiversity value of the Betteshanger site and its lack of detail on species composition does not allow the Planning Authority to come to a lawful decision about the effect of the development on protected and priority species. There are serious omissions and timing faults and lack of detail on how effects on habitats and species will be avoided, mitigated or compensated for. Plus, there are conclusions drawn that are unreliable and cannot be justified by the content of the Appraisal.

The Planning officers and Planning Committee need to be aware of the shortcomings of the Ecological Appraisal and should not assume it can be used to judge the ecological value of the Betteshanger site. Nor should it form the basis of meeting their statutory duty to conserve biodiversity. Given that the Appraisal is clearly not fit for purpose the Planning Officers should require Quinn Estates to carry out a full Ecological Impact Assessment as recommended by CIEEM or refuse planning permission.

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Appendix 1

List of vascular plants seen at **Betteshanger Community Park**, May 26 – June 02 2020 (+ a few previous records) Sue Buckingham

Conservation status: Species highlighted here are

- protected species under schedule 8 of Wildlife and Countryside Act 1981,
- species whose status is Near Threatened or above that level on the England or UK Red Data List,
- species included in the Kent Rare Plant Register
- species which are included on the list of Kent Axiophytes (indicators of habitat that is considered important for conservation).

Taxon	Vernacular	Conservation status
Acer campestre	Field Maple	
Acer pseudoplatanus	Sycamore	
Agrimonia eupatoria	Agrimony	
Agrostis capillaris	Common Bent	
Agrostis stolonifera	Creeping Bent	
Aira caryophyllea	Silver Hair-grass	Kent Axiophyte
Aira praecox	Early Hair-grass	Kent Axiophyte
Alchemilla mollis	Garden Lady's-mantle	
Allium roseum	Rosey Garlic	
Alnus glutinosa	Alder	
Anacamptis pyramidalis	Pyramidal Orchid	Kent Axiophyte
Anagallis arvensis	Scarlet Pimpernel	
Anisantha sterilis	Barren Brome	
Anthoxanthum odoratum	Sweet Vernal-grass	
Apera interrupta	Dense Silky-bent	
Aphanes arvensis	Parsley-piert	
Arenaria leptoclados	Slender Sandwort	
Arenaria serpyllifolia	Thyme-leaved Sandwort	
Arrhenatherum elatius	False Oat-Grass	
Artemisia vulgaris	Mugwort	
Avenula pubescens	Downy Oat-grass	Kent Axiophyte
Bellis perennis	Daisy	
Betula pendula	Silver Birch	
Blackstonia perfoliata	Yellow-wort	Kent Axiophyte
Bromus hordeaceus	Soft-brome	
Buddleja davidii	Butterfly-bush	
Carduus crispus	Welted Thistle	
Carduus tenuiflorus	Slender Thistle	
Carex acutiformis	Lesser Pond-sedge	
Carex divulsa subsp. Divulsa	Grey Sedge	
Carex flacca	Glaucous Sedge	
Carex hirta	Hairy Sedge	

Carex otrubae	False Fox-sedge	
Carex pendula	Pendulous Sedge	
Carlina vulgaris	Carline Thistle	Near threatened (England Red List) Kent Rare Plant Register/ Kent Axiophyte
Catapodium rigidum	Fern-grass	
Centaurea nigra agg.	Black Knapweed	
Centaurium erythraea	Common Centaury	
Centaurium pulchellum	Lesser Centaury	Kent Axiophyte
Cerastium fontanum	Common Mouse-ear	
Cerastium glomeratum	Sticky Mouse-ear	
Cerastium semidecandrum	Little Mouse-ear	
Cirsium arvense	Creeping Thistle	
Cirsium vulgare	Spear Thistle	
Clematis vitalba	Traveller's-joy	
Cochlearia danica	Danish Scurvygrass	
Conium maculatum	Hemlock	
Convolvulus arvensis	Field Bindweed	
Cornus sanguinea	Dogwood	
Cotoneaster horizontalis	Wall Cotoneaster	
Crataegus monogyna	Hawthorn	
Crepis capillaris	Smooth Hawk's-beard	
Cynosurus cristatus	Crested Dog's-tail	
Dactylis glomerata	Cock's-foot	
Dactylorhiza praetermissa	Southern Marsh-orchid	
Daucus carota subsp. Carota	Wild Carrot	
Dipsacus fullonum	Wild Teasel	
Echium vulgare	Viper's-bugloss	
Epilobium brachycarpum	Panicled Willowherb	
Epilobium hirsutum	Great Willowherb	
Epilobium lanceolatum	Spear-leaved Willowherb	
Epilobium tetragonum	Square-stalked Willowherb	
Equisetum telmateia	Great Horsetail	
Erigeron acris	Blue Fleabane	Kent Axiophyte
Erodium cicutarium	Common Stork's-bill	
Erodium moschatum	Musk Stork's-bill	
Erophila verna sens. lat.	Common Whitlowgrass	
Eupatorium cannabinum	Hemp-agrimony	
Euphorbia exigua	Dwarf Spurge	Vulnerable (England Red List) Kent RPR/ Kent Axiophyte
Euphorbia peplus	Petty Spurge	
Euphrasia nemorosa	Eyebright	
Festuca ovina	Sheep's-fescue	Kent Axiophyte
Festuca rubra	Red Fescue	
Filago vulgaris	Common Cudweed	Near Threatened (England Red List) Kent RPR/ Kent Axiophyte
Foeniculum vulgare	Fennel	nene may remerodophyte
Fragaria vesca	Wild Strawberry	Near Threatened (England Red List)

C-DIL	Hadaa Dadabaaa	Kent RPR/ Kent Axiophyte
Galium album	Hedge Bedstraw	Male and I de la
Galium parisiense	Wall Bedstraw	Vulnerable (National & England Red Lists) Kent RPR.
Galium verum	Lady's Bedstraw	
Geranium dissectum	Cut-leaved Crane's-bill	
Geranium molle	Dove's-foot Crane's-bill	
Geranium pusillum	Small-flowered Crane's-bill	
Geranium rotundifolium	Round-leaved Crane's-bill	
Geum urbanum	Wood Avens	
Glechoma hederacea	Ground-ivy	
Helminthotheca echioides	Bristly Ox-tongue	
Heracleum sphondylium	Hogweed	
Hippophae rhamnoides	Sea-buckthorn	Kent RPR
Hirschfeldia incana	Hoary Mustard	
Holcus lanatus	Yorkshire-fog	
Hordeum murinum	Wall Barley	
Hypericum perforatum	Perforate St John's-wort	
Hypochaeris radicata	Cat's-ear	
Inula conyzae	Ploughman's-spikenard	Kent Axiophyte
Iris foetidissima	Stinking Iris	
Juncus articulatus	Jointed Rush	
Juncus bufonius	Toad Rush	
Juncus inflexus	Hard Rush	
Lepidium draba	Hoary Cress	
Leucanthemum vulgare	Oxeye Daisy	
Ligustrum vulgare	Wild Privet	
Linaria vulgaris	Common Toadflax	
Linum catharticum	Fairy Flax	
Lolium perenne	Perennial Rye-grass	
Lotus corniculatus	Common Bird's-foot-trefoil	
Lythrum hyssopifolia	Grass-poly	Protected species under Schedule 8 of Wildlife and Countryside Act 1981 ENDANGERED (National & England Red Lists) Kent RPR.
Malva sylvestris	Common Mallow	
Matricaria chamomilla	Scented Mayweed	
Matricaria discoidea	Pineappleweed	
Medicago arabica	Spotted Medick	
Medicago lupulina	Black Medick	
Melissa officinalis	Balm	
Myosotis arvensis	Field Forget-me-not	
Myriophyllum spicatum	Spiked Water-milfoil	
Oenothera agg.	Evening Primrose	
Ononis repens	Common Restharrow	Kent Axiophyte
Ophrys apifera	Bee Orchid	
Origanum vulgare	Wild Marjoram	
Oxalis articulata	Pink-sorrel	
Pastinaca sativa subsp.	Wild Parsnip	

Sylvestris		
Phragmites australis	Common Reed	
Picris hieracioides	Hawkweed Oxtongue	
Pilosella officinarum	Mouse-ear-hawkweed	
Plantago coronopus	Buck's-horn Plantain	
Plantago lanceolata	Ribwort Plantain	
Plantago major	Greater Plantain	
Poa annua	Annual Meadow-grass	
Poa compressa	Flattened Meadow-grass	
Poa trivialis	Rough Meadow-grass	
Populus alba	White Poplar	
Potentilla reptans	Creeping Cinquefoil	
Prunella vulgaris	Selfheal	
Pulicaria dysenterica	Common Fleabane	
Quercus ilex	Evergreen Oak	
Quercus robur	Pedunculate Oak	
Ranunculus acris	Meadow Buttercup	
Ranunculus bulbosus	Bulbous Buttercup	
Ranunculus parviflorus	Small-flowered Buttercup	Kent RPR/ Kent Axiophyte
Reseda luteola	Weld	
Rosa canina agg.	Dog-rose	
Rosa rubiginosa	Sweet-briar	Kent Axiophyte
Rumex acetosella	Sheep's Sorrel	
Rumex crispus	Curled Dock	
Rumex sanguineus	Wood Dock	
Sagina apetala	Annual Pearlwort	
Salix caprea	Goat Willow	
Salix cinerea	Grey Willow	
Salix viminalis	Osier	
Sambucus nigra	Elder	
Samolus valerandi	Brookweed	Kent Axiophyte
Scrophularia auriculata	Water Figwort	
Scrophularia nodosa	Common Figwort	
Sedum acre	Biting Stonecrop	
Sedum album	White Stonecrop	
Senecio erucifolius	Hoary Ragwort	
Senecio jacobaea	Common Ragwort	
Sherardia arvensis	Field Madder	
Silene latifolia	White Campion	
Silene vulgaris	Bladder Campion	
Sisyrinchium striatum	Pale Yellow-eyed-grass	
Sonchus asper	Prickly Sow-thistle	
Symphytum orientale	White Comfrey	
Taraxacum agg.	Dandelion	
Teucrium scorodonia	Wood Sage	
Torilis nodosa	Knotted Hedge-parsley	
Trifolium campestre	Hop Trefoil	
Trifolium dubium	Lesser Trefoil	
Trifolium ornithopodioides	Bird's-foot Clover	Kent Axiophyte
Trifolium pratense	Red Clover	

Trifolium repens	White Clover	
Trifolium suffocatum	Suffocated Clover	
Tussilago farfara	Coltsfoot	
Ulex europaeus	Gorse	
Urtica dioica	Common Nettle	
Valerianella carinata	Keeled-fruited Cornsalad	
Verbascum blattaria	Moth Mullein)	
Verbascum thapsus	Great Mullein	
Verbena officinalis	Vervain	
Veronica arvensis	Wall Speedwell	
Veronica chamaedrys	Germander Speedwell	
Veronica officinalis	Heath Speedwell	Kent RPR/ Kent Axiophyte
Veronica serpyllifolia	Thyme-leaved Speedwell	
Viburnum opulus	Guelder-rose	
Vicia lathyroides	Spring Vetch	Kent Axiophyte
Vicia sativa subsp. segetalis	Common Vetch	
Vicia tetrasperma	Smooth Tare	
Viola odorata	Sweet Violet	
Viola riviniana	Common Dog-violet	
Vulpia bromoides	Squirreltail Fescue	

Appendix 2

BETTESHANGER PARK BIRD SURVEY

INTRODUCTION:

Following the application to build on the Betteshanger Park site and obtaining the report by Aspect it was decided to carry out a breeding bird survey. The 2020 CV-19 outbreak delayed a fuller survey but thorough visits were undertaken in late May and throughout June 2020 when the Government and British Trust for Ornithology rules allowed. Notes of previous visits at different times of the year are included to give a fuller picture of distribution and populations of birds at this site. Counts were recorded in January, March, May, June, July, August and November over the last four years. Note that the main migration months of September and October are not included and that the final count of species at the site recorded here will be a minimum.

CONSERVATION STATUS:

All birds in the UK are protected by law. The level of protection of each species varies depending on its status within the legislation. The Wildlife and Countryside Act 1981 (as amended) is the principal legislation affording protection to all wild birds in the UK. Under this legislation all birds, their nests and eggs are protected against damage and destruction. Species listed on Schedule 1 of the Act are afforded special protection against disturbance due to their conservation rarity or other issues affecting their populations. This special protection includes protection from disturbance whilst nesting.

These counts will assist the land managers to take wildlife on site into account to ensure the law is complied with.

In addition to statutory protection, British bird species can be classified according to their conservation status including their position on the Red and Amber lists of Birds of Conservation Concern 4 (BoCC) in the UK (Eaton et al, 2015). This list helps prioritise efforts to help the species that are most vulnerable.

METHOD:

Counts were undertaken outside the breeding seasons on a casual basis. These will have been mostly in the mornings although at least five occurred in the hours of darkness as part of the search for Beavers in the area.

The breeding season visits were carried out in a more formalised way to enable a more complete assessment to be carried out. The site is elongated. A transect that convers all habitats was undertaken in the early mornings (04.00 to 09.00) particularly in May and June 2020. It comprised a slow and steady walk up one side and back along the other listening for song or calls and sight records. This method is based on the instructions for the Common Bird Census and Breeding Bird Survey organised by the British Trust for Ornithology.

Breeding status	Nature of evidence record
Confirmed breeder	FL – recently fledged young or downy young
	ON – adults entering or leaving nest-site in
	circumstances indicating occupied nest
Probable breeder	Evidence accumulated during the survey indicates that
	the bird species is breeding on site.
	P – pair in suitable nesting habitat
Possible breeder	Evidence during the survey indicates that
	the bird species could be breeding on site, but the
	evidence is less conclusive than that obtained for
	probable breeders.

H – observed in suitable nesting habitat

S – singing male

Non-breeder or breeding nearby F –flying over

N - Non-breeder present

RESULTS:

The following list contains all species recorded in the last four years by the East Kent Wildlife Group. A total of 105 species have been recorded. The Birds of Conservation Concern 4 status have a comment to this effect after the name, followed by a BTO activity code(s) and a summary of their status. The most important species are highlighted by the use of upper-case letters.

- Mute Swan Amber F. Has bred on the stream and water features near the entrance 1. roadside angling lake. Seen occasionally.
- Greylag Goose Feral F. Has bred nearby and seen once flying over. 2.
- Shelduck Amber F. Occasionally noted flying over the site. 3.

- MALLARD AMBER P. A decreasing breeding and wintering population has led to this
 species being put on the Amber list. It is present at this site throughout the year in small
 numbers on the three larger ponds. It probably breeds on site most years.
- Teal Amber N. Occasionally seen in winter.
- 6. GREY PARTRIDGE RED P. This rapidly declining species is present throughput the year in small numbers even as recently as June 2020. It is associated with the agricultural land surrounding the site. It probably breeds on site or at least very nearby and the vegetation is suitable for this species to feed all year round.
- 7. Pheasant Feral H. A non-native species.
- 8. Little Grebe Green N. Occasional visitor. May have bred.
- 9. Cormorant Green F. Occasionally noted flying over.
- Little Egret Green N. Irregular visitor to the ponds.
- 11. Grey Heron Green N. One or two recorded on most visits, mainly on the larger pond. The trees surrounding the ponds have grown up to give the birds sufficient cover from humans and dogs at least during the growing season.
- 12. Red Kite Green F. Increasingly recorded noted flying over on migration, particularly in the spring of 2020.
- 13. Marsh Harrier Green N. Single record of a migrant.
- 14. Common Buzzard Green F. Regularly noted flying over. Nests nearby.
- 15. Kestrel Amber F. often noted hovering over the site and will feed on the small mammals and larger insects present. Nests nearby.
- 16. Hobby Green F. Rarely seen on migration.
- 17. Moorhen Green ON and FL. Confirmed breeding on the larger of the ponds.
- 18. Coot Green H. Occasionally noted on the larger ponds and may breed.
- 19. Oystercatcher Amber N. Occasional records of birds flying.
- 20. Ringed Plover Red N. Occasional records. Breeds nearby.
- 21. Little Ringed Plover Green N. Single spring fly-over.
- 22. Golden Plover Green N. Regular overhead in winter.
- 23. Lapwing Red N. Regular overhead, mainly in winter. Breeds nearby.
- 24. Green Sandpiper Amber N. Occasional records in early autumn migration.
- 25. Redshank Amber N. Single record overhead.
- 26. Curlew Red N. Occasional in winter.
- 27. Snipe Amber Regular small numbers in winter.
- 28. Black-headed Gull Amber F. Noted flying over regularly
- 29. Mediterranean Gull Amber F. Rarely noted flying over during migration.
- 30. Common Gull Amber F. Occasionally noted overhead in the colder months.
- 31. Herring Gull Red F. Noted very regularly overhead throughout the year. Nests nearby.
- 32. Lesser Black-backed Gull Amber F. Occasionally noted overhead during migration times.
- 33. Greater Black-backed Gull Amber F. Rarely noted overhead.
- 34. STOCK DOVE AMBER P. A probable breeding species with five individuals noted in May 2020. They nest in holes in mature trees and there are suitable nest sites particularly around the edges of the site. They take well to suitable nest boxes.
- 35. Collared Dove Green P. Almost certainly nesting in small numbers.
- 36. TURTLE DOVE RED P (2019 and 2020), ON (2018). This is a species of greatest conservation concern. Turtle doves have declined in the UK by 93 per cent since the 1970s. They are ecologically unique in the UK as our only migratory dove species and face a range of threats across their flyway including habitat loss on wintering and breeding grounds, hunting and disease. Every attempt should be made to preserve sites that have Turtle Doves as they are very site faithful. Four purring males were recorded by Aspect in 2019 and there were at least two males in May and June 2020. Sight records suggest that they feed on site, particularly where grasses and short seeding plants occur including the actual areas where

housing is planned. The Turtle Doves present would suffer by their feeding grounds being built on, their nesting sites being reduced and by the increase in disturbance during the months that they visit. The loss of any Turtle Doves must be avoided and mitigation is near impossible. The assessment by Aspect Ecology is wholly inadequate for this species.

- 37. Feral Pigeon Feral N. Some were noted on site and they probably nest nearby.
- 38. Woodpigeon Green ON. A common and regular species which almost certainly nests in the wooded areas.
- 39. CUCKOO RED S. A rapidly declining species. Both males and females were heard calling on site in May and June. There are suitable hosts present for this parasitic species.
- 40. Tawny Owl Amber S. Regularly heard at night by near the entrance roadside angling lake. It either nests here or very nearby.
- 41. Barn Owl Green F. A Schedule One species that often hunts over the site in the evenings. It nests nearby and the site represents part of its hunting territory.
- 42. Little Owl Green N. Occasionally heard at night. Nests nearby.
- 43. Swift Amber F. These nest nearby and can be seen feeding over the site, Particularly in late July and early August.
- 44. KINGFISHER AMBER H. Regularly seen, particularly near the entrance roadside angling lake. It is quite possible that it nests here or nearby.
- 45. Green Woodpecker Green H. Possibly nests. Present throughout the year.
- 46. Great Spotted Woodpecker Green H. Possibly nests. Present throughout the year.
- 47. Skylark Red S. Nests nearby. Frequently heard singing over the adjacent fields.
- 48. Barn Swallow Green F. Nests nearby and regularly seen feeding overhead and around the ponds.
- 49. House Martin Amber F. Nests nearby and feeds over the site.
- 50. Sand Martin Green F. Seen only on migration in small numbers.
- 51. Meadow Pipit Amber N. Recorded throughout the year in small numbers.
- 52. Tree Pipit Red N. Infrequent singles on migration.
- 53. Pied Wagtail Green Present throughout the year and it breeds nearby.
- 54. Grey Wagtail Amber A few are recorded on migration.
- 55. Yellow Wagtail Amber This once common local bird is now very scarce. Only one recorded in 2019 and none so far in 2020.
- 56. DUNNOCK AMBER FL. Regular breeding population on site.
- 57. Robin Green FL. A common bird throughout the year.
- 58. SONG THRUSH RED FL. This declining species still nests in the woodland. It has all but disappeared from urban habitats having once been common. A housing development is likely to reduce numbers here further.
- 59. MISTLE THRUSH RED S. Once widespread, this bird is now fragmented across the countryside.
- 60. Black bird Green S. A common nesting species.
- 61. Redwing Red N. Occasional in winter.
- 62. Fieldfare Red N. Occasional in winter.
- 63. Black Redstart Green N. Single record of a migrant in March.
- 64. Wheatear Green N. Single migrant recorded in March.
- 65. Stonechat Green N. Occasionally recorded in winter.
- 66. Garden Warbler Green The woodland available on this site is suitable habitat for this warbler to breed.
- 67. Blackcap Green S. Numerous in spring and summer in the scrub and woodland.
- 68. Lesser Whitethroat Green S. A single singing male was present in the scrubby area
- 69. Whitethroat Green S. Found in the scrubby areas.
- 70. Sedge Warbler Green S. A few pairs found in herbage around the wetland sites.

- 71. Reed Warbler Green S. This summer nesting species is present in areas with *Phragmites communis* (Common Reed).
- 72. WILLOW WARBLER AMBER S. A rapidly declining local species.
- 73. Chiffchaff Green S. Common summer migrant.
- 74. Yellow-browed Warbler Vagrant. Single bird calling in November 2018.
- 75. Cetti's Warbler Green S. A recent coloniser present in the wetter habitats.
- 76. Firecrest Green N. Infrequent on migration.
- 77. Goldcrest Green N. Regular in autumn and winter.
- 78. Wren Green S. A common resident.
- 79. Great Tit Green FL. Nests in the woodland in small numbers.
- 80. Blue Tit Green FL. Nests in the woodlands in reasonable numbers.
- 81. Coal Tit Green N. Occasional visitor.
- 82. Long-tailed Tit Green FL. At least three family groups located on the site.
- 83. Treecreeper Green S. A single singing male in the woodland.
- 84. Magpie Green FL. Breeds in small numbers though regular throughout the year.
- 85. Jay Green P. A pair probably nested in the woodland.
- 86. Jackdaw Green N. Breeds nearby. Frequent overhead.
- 87. Rook Green F. Breeds nearby.
- 88. Carrion Crow Green F. Breeds nearby.
- 89. Raven Green N. Recently birds have been noted flying over the site.
- 90. Starling Red N. Regularly seen on site throughout the year but not thought to nest on site.
- 91. House Sparrow Red P. Present on all visits. Possibly bred on site and breeds nearby.
- 92. Tree Sparrow Red N. Single bird noted in November on migration.
- 93. Chaffinch Green S. Common in the woodland throughout the year.
- 94. Brambling Winter Visitor N. Occasional overhead in winter.
- 95. LINNET RED P. Almost certainly nests here. This site has very suitable habitat and Linnets have been recorded throughout the year but mainly during the breeding season. They nest in the hedgerows and scrub around the site.
- 96. Lesser Redpoll Red N. Occasionally recorded in winter.
- 97. Common Redpoll Amber N. Recorded once in November.
- 98. Siskin Green N. Small numbers feeding on Alder in winter.
- 99. Goldfinch Green P. A regular and common bird, mainly in the breeding season.
- 100. Greenfinch Green S. Numbers of this species fluctuate nationally and only one singing male was noted this year.
- 101. BULLFINCH AMBER P. Most often found in pairs, at least one pair was found regularly at different times of the year including the breeding season.
- 102. REED BUNTING AMBER S. Frequently found around the wetland edges of the site.
- 103. Yellowhammer Red N. Breeds nearby.
- 104. Corn Bunting Red S. This rapidly declining species was not found in 2020 though there are many records previously.
- 105. Common Crossbill Green N. Occasionally heard flying overhead.

The following species were found in the breeding season 2020 with the number of pairs/singing males/fledged young recorded. Note that this does not match the Aspect survey data provided.

Mallard 1	Grey Partridge 1	Moorhen 2	Collared Dove 2
Turtle Dove 2	Stock Dove 5	Woodpigeon 4	Gr't Spotted Woodpecker 2
Kingfisher 1	Robin 2	Blackbird 7	Song Thrush 2
Mistle Thrush 1	Wren 14	Dunnock 1	Garden Warbler 3
Blackcap 24	Whitethroat 2	Lesser Whitethroat 1	Reed Warbler 7

Sedge Warbler 2	Chiffchaff 7	Willow Warbler 1	Cetti's Warbler 2
Treecreeper 1	Blue Tit 4	Great Tit 2	Long-tailed Tit 3
Magpie 2	Chaffinch 5	Greenfinch 1	Goldfinch 3
Linnet 2	Bullfinch 1	House Sparrow 1	Reed Bunting 2

The BoCC4 red species probably breeding on the site are Grey Partridge, Cuckoo, Turtle Dove, Song Thrush, Mistle Thrush and Linnet.

The BoCC4 amber species probably breeding on the site are Mallard, Stock Dove, Kingfisher, Dunnock, Willow Warbler, Bullfinch and Reed Bunting.

MITIGATION:

The section provided by the Aspect report on the effects that the development would have on the biodiversity of the site is wholly inadequate. The suggested elements of mitigation fall far short of the requirements. For example, planting more trees would most likely reduce the biodiversity by shading out the ground flora and subsequent wildlife associated with it on this sensitive habitat.

REFERENCES:

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