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Planning Inspectorate

BY EMAIL ONLY

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Dear Planning Inspectorate

M25 Junction 10 / A3 Wisley Interchange Project – TR010030

The Examining Authority's fourth written questions and requests for information (ExQ4) - Issued on 21 May 2020

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

Please find below the Examiner's questions to Natural England with our responses:

4.3.2 Applicant, Natural England (NE), Elmbridge Borough Council (EBC), Guildford Borough Council (GBC) and RHS
You are all requested to provide your organisations' corporate views on the effect of the Government's evolving policy to reduce vehicle emissions might have for the consideration of the air quality impacts of the Proposed Development. In replying to this question, you should provide an indication of:
1) the individual emissions types that might change and the magnitude of change for those particular emissions; and
2) how any changes to emissions may arise over time, using 2015 as the base year, and plotting any changes on a graph of a form that you consider most appropriate to depict the information being provided.

Natural England is an evidence led organisation, and respond with reference to data around long term trends of air pollutants. We do not have a formal corporate view on impacts of evolving policy. However I can confirm that the key pollutants we consider when accessing planning applications are the Nitrogen based pollutants. Ammonia, Nitrogen Deposition and Atmospheric Nitrogen. These are the key pollutants likely to affect habitats.

4.4.1 Applicant, NE and RHS
The ExA notes the answers made at Deadline 7 to its third written question 3.2.2 (any implications of the Court of Appeal's judgement concerning the Airports National Policy Statement) [PD-016]. With respect to '… any in-principle type considerations raised in the recent Court of Appeal judgement …' do you have any comments to make with respect to the Court of Appeal's findings with respect to the consideration of 'reasonable alternatives' under the Habitats Directive?

No comments to make.

4.4.2 NE and Surrey Wildlife Trust (SWT)
Please comment on:
a) how dependent the breeding populations of Dartford warbler, European nightjar and Woodlark (the SPA's qualifying features) are on the invertebrate assemblage present in the woodland adjacent to the M25 and A3 and which forms part of the SPA. Do these qualifying features require particular species as part of their diet? Are they specialist or generalist in their dietary requirements?
b) whether there is any notable difference in the nature of the invertebrate assemblage found in the woodland and heathland areas of this part of the SPA, and if there is a notable difference what form does that take?
c) what is the sensitivity of the invertebrate assemblage present in this part of the SPA to the level of Nitrogen deposition?
d) having regard to the predicted air quality levels within the various proposed SPA Enhancement Areas and Compensation Land areas, how confident are you that they will be able to function so as to offset any potential loss in carrying capacity and/or food resource as a result of the Proposed Development?

All three Annex 1 bird species are essentially heathland birds where they occur in the Thames Basin Heaths SPA. Dartford warbler nest in dense patches of gorse or in tall heather and feed mainly upon spiders which live in the vegetation, but will also take other small insects such as beetles and caterpillars. Woodlark favour areas of bare or sparsely vegetated areas for nesting and feeding. They feed on small seeds and small invertebrates such as ants and beetles on the ground. Nightjar nest in small patches of bare ground in heathland in places with good visibility across surrounding areas so that they can see predators approaching. They feed at night favouring areas where moths congregate such as sheltered edges of heathland margins. Besides moths nightjars will take other insects such as flies, chafers and dragonflies. So all three species have feeding preferences but are also generalist to a large degree and will take advantage of whatever invertebrate food is available.

There are significant differences in the invertebrate assemblages present in the open heathland and in the woodland. The invertebrate assemblages associated with shady woodland have a larger proportion of invertebrates associated with dead and decaying wood, and with trees generally, and a significant proportion of the assemblage is associated with the shady ground layer, stands of bracken, bramble thickets and so on.

The particular sensitivities of invertebrate assemblages to nitrogen deposition has not been studied in detail. It could be predicted that there may be small changes in the balance between particular species or species groups if for example nitrogen deposition encouraged growth of bramble and this replaced bracken. However, whether this is likely to result in a measurable change in overall abundance of invertebrates is much more difficult to predict and would depend on a wide range of other factors.

The land manager at Ockham and Wisley Commons, Surrey Wildlife Trust has a proven track record in the restoration of heathland habitat following tree clearance. Good quality habitat is now present in areas which were occupied by dense broadleaved and conifer woodland in the 1980s and 1990s. Natural England is confident that with appropriate measures in place that the heathland creation proposed by the applicant will have similar success and will significantly enhance habitat suitability for the Annex 1 birds.

4.4.3 NE and SWT
Please submit a copy of the 2010-2020 Wisley and Ockham Management Plan, as referred to in paragraph 7.2.12 of the Applicant's 'Habitats Regulations Assessment: Stage 2: Statement to inform appropriate assessment' [REP4-018]. Only one copy of this document need be submitted and NE and SWT should decide between

themselves as to which organisation is best placed to submit it.

I understand that Surrey Wildlife Trust have submitted this plan.

4.4.4 NE and SWT

Are the management prescriptions for the Ockham and Wisley Commons SSSI component of the SPA the same as for the other parts of the SPA or are they component specific? If the management prescriptions are different for the Ockham and Wisley Commons SSSI component of the SPA, please give examples of how they differ from the management prescriptions for other parts of the SPA.

Each component part of Thames Basin Heaths SPA is underpinned by a separate SSSI and therefore the objectives of each component are, to a large degree, determined by the nature of the SSSI and the reasons for its designation as SSSI. Some component parts are largely made up by commercial forestry plantations, other parts are military training areas, whilst others have high levels of public access. Management prescriptions are therefore driven by the type of habitat present, the management options available and the pressures on the site.

In the case of Ockham and Wisley Commons SSSI it is acknowledged by Natural England that this site suffered badly from management neglect in the 1970s such that only a small area of open heathland remained present in the 1980s. So the emphasis of our management advice has been to encourage the restoration of open heathland where this is most likely to produce good quality habitat and to focus effort on bringing this into good condition.

4.4.7 NE, Applicant and RHS

Has the Institute of Air Quality Management or any other UK professional body, such as the Chartered Institute of Ecology and Environmental Management, produced any guidance requiring the effects of ammonia on SPAs to be assessed? If any such guidance has been produced, then a copy of it should be submitted. Only one copy of any such guidance need be submitted and NE, the Applicant and the RHS should decide between themselves as to which organisation is best placed to submit it.

Natural England is not aware of any such documents or guidance on this specific aspect where it might have relevance to this case.

4.4.8 NE

At paragraph 68 of REP8-054 the RHS has stated that it recognises that the '… Emissions Factors Toolkit does not include ammonia …'. Please comment why you consider the Emissions Factors Toolkit does not refer to ammonia and set out what you consider to be the implications of this omission in regard to the Proposed Development.

I have discussed the matter with our Air Pollution Specialists. They advise that ammonia is most likely not included in the Toolkit at the moment as there is an evidence gap around ammonia and road emissions. It is a matter our specialists are aware of and are aiming to discuss with AQTAG to consider whether it is an issue that needs to be addressed.

4.4.9 NE

At paragraph 67 of REP8-054 the RHS has referred to ammonia from road traffic having been incorporated into the assessment in connection with the preparation of the Local Plans for Wealden District Council, Epping Forest District Council and

Havant Borough Council. Please explain why you consider ammonia emissions from road traffic has been considered in connection with the preparation of the Local Plans for each of the previously mentioned local planning authorities.

In each of the cases cited the inclusion of ammonia emissions from road traffic will have been included in assessment of potential impacts because of the presence of sensitive features at European sites in or around the borough. For example, in the case of Epping Forest this is an internationally important site for its assemblage of veteran trees supporting epiphytic lichens. Lichens are highly sensitive to aerial pollution and so assessment of potential impacts arising from ammonia deposition is an important consideration.

4.4.11 NE

Having regard to the fact that the SPA has been designated to sustain the favourable conservation status of the populations of the three 'Interest' (Qualifying) Features, i.e. the Dartford Warbler, European nightjar and Woodlark, please explain the precise function and importance which the woodland that immediately adjoins the M25 and the A3 performs in the pursuance of the maintenance of the SPA's integrity.

Any woodland immediately adjacent to the M25 and A3 is likely to have an important 'buffering' function in respect to the maintenance of the SPA, that is it may help to ameliorate the potential effects of raised nutrient levels from vehicle emissions (by helping to disperse emissions), it helps to provide a barrier against litter arising from the road reaching open heathland and may help to reduce the risk of fires spreading from the roadside and into open heath. These would not be considered to be critical functions by Natural England but they are important in this location.

4.4.12 NE

In REP8-054 the RHS has criticised the Applicant's reliance on overall invertebrate biomass considerations in reaching its conclusions. However, in REP9-003, page 10, the Applicant contends that the 'established woodland buffer will continue to function in the same way as it currently does and provide the same invertebrate resource as it currently does' and has referred to both the assemblage and biomass of the invertebrate resource being unchanged. Please comment on this, having regard to the particular prey requirements of each of the qualifying features of the SPA and the potential impacts of emissions resulting from both the Proposed Development and the 'RHS Alternative Scheme' on these prey species of the SPA qualifying features. Also please comment on the impacts on invertebrates and the SPA qualifying features as a result of any changes to the woodland buffer, for example through habitat management in the proposed enhancement areas or the erection of the Cockcrow Bridge.

As all three Annex 1 bird species are essentially heathland species where they occur in Thames Basin Heaths SPA it seems highly unlikely that small changes in invertebrate abundance in the woodland buffer will make any measureable difference to overall food availability for these birds. Dartford warbler are extremely unlikely to be affected at all as they feed almost exclusively on invertebrates living in their immediate territory (usually a fairly small area of dense gorse or mature heather). Similarly, woodlark are extremely unlikely to be affected. They do not generally feed on invertebrates associated with woodland, rather they feed almost exclusively on species associated with warm, open ground such as ants and ground beetles. Nightjar can range over quite large areas to feed. So small changes in prey availability, should they occur, are unlikely to have any measurable impact on nightjar. They will simply select other areas for feeding. It is also important to bear in mind that nightjar favour woodland edge transitions to heathland for feeding. The overall

extent of woodland edge habitat in the woodland buffer is not significantly altered by the scheme.

The overall effect of the scheme as proposed will be to improve the suitability of the area to support Annex 1 birds. The habitat enhancement works to improve structural variation in the SPA compensation areas, the significant area of heathland creation and the addition of one or more green bridges will all contribute towards increasing the extent and suitability of the habitats to support all three species. Natural England has provided the applicant with advice over these aspects from an early stage and we are confident that significant benefits for the SSSI and SPA can be achieved.

4.4.13 RHS, NE and Applicant

In REP8-054 the RHS cites evidence that demonstrates an effect due to Nitrogen deposition on moth species that are adapted to low Nitrogen levels. How sensitive is the invertebrate assemblage in this part of the SPA to the effects of Nitrogen deposition?

As stated above Natural England does not believe that small changes in invertebrate biomass in the woodland buffer, should they occur, would have measurable effects on the ability of the site to support nightjar.

4.4.14 NE

At paragraphs 40 to 42 of REP8-054 the RHS contends that the Applicant in REP7-008 has 'selectively quoted' from and incorrectly interpreted the conservation objectives for the SPA. Having regard to what the Applicant has stated in REP7-008 and the RHS in REP8-054 in terms of whether there would or would not be an adverse effect on the integrity of the SPA, please comment on whether there has been any misrepresentation by the Applicant about the Proposed Development's relationship with the SPA's conservation objectives insofar as those relate to the Ockham and Wisley Commons SSSI component of the SPA.

Natural England is satisfied that the Applicant properly understands the conservation objectives for Thames Basin Heaths SPA, including how those relate to the Ockham and Wisley Commons SSSI component.

4.4.15 NE

Please comment on the RHS's contention in REP9-014 that the conclusion you have drawn in your Statement of Common Ground [REP8-022] is incorrect in regard to the potential impact on air quality of the SPA woodland areas within 150m of the roads. Also, please comment as to whether or not air quality effects could hamper any future restoration of the woodland buffer, if so required.

As stated above, the primary function of the woodland alongside the M25 and A3 is to provide a 'buffering' function, ie to help to ameliorate the potential effects of raised nutrient levels affecting supporting habitat of Annex 1 birds by helping to disperse vehicle emissions. Natural England is confident that aerial pollution effects, should they occur, in the woodland buffer will not have measurable effects on the Annex 1 bird species.

In the event that a decision is made to create heathland or some other habitat in place of the existing woodland buffer raised nutrient levels may be a factor which would have to be taken into account when planning operations but it would not be an insurmountable problem. There are many cases where heathland and other habitats of biodiversity value have been created close to busy roads. These projects need careful planning and different management

techniques in comparison with lower nutrient situations. However, they are achievable.

4.4.17 NE

In referring to land take within the SPA, paragraph 94 and footnote 2 of REP8-054, the RHS has cited the concept of 'site fabric' and the definition of that as used by you, without providing a reference for the source document within which that definition is found.

1) Please provide a copy of the document which sets out the definition for site fabric.

2) With respect to the SPA land which the Applicant has identified as being either permanently or temporarily affected by the Proposed Development, please advise whether you consider any of that land falls into your definition of 'site fabric' of the SPA and should potentially be excluded from the Applicant's calculation identifying the amount of land required as SPA 'compensatory' and 'enhancement' land as part of the Proposed Development.

Natural England has never used the term 'site fabric' in this context. That term is used by Natural England to mean areas of habitat which were included in a designated site for purely pragmatic reasons and are areas which do not contribute in any way to the special nature conservation interest. That is not the case here. We have always maintained that areas of woodland permanently or temporarily lost as a result of scheme construction have a value which must be compensated for.

I trust that this information is helpful.

Yours sincerely,

[redacted]

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Thames Solent Team