

**LAND OFF PUMP LANE
RAINHAM
KENT
ME8 7TJ**

**TOWN AND COUNTRY PLANNING ACT 1990
APPEAL REFERENCE: APP/A2280/W/20/3259868**

APPEAL BY A C GOATHAM & SON

**INQUIRY DOCUMENT: Additional Matters Raised In Relation To Ecology, Biodiversity
And Air Quality**

PREPARED BY: Tom Goodwin and Philip Branchflower

26/02/2021

INQUIRY DOCUMENTS REF: ID 25

Ecology Solutions Limited
Farncombe House
Farncombe Estate
Broadway
Worcestershire
WR12 7LJ

+44(0)1451 870767
info@ecologysolutions.co.uk
www.ecologysolutions.co.uk



8252: LAND AT PUMP LANE AND LOWER BLOORS FARM, LOWER RAINHAM

INQUIRY NOTE: ADDITIONAL MATTERS RAISED IN RELATION TO ECOLOGY, BIODIVERSITY AND AIR QUALITY

1. Ecological matters were raised on 22.2.21 by the Inspector in questions to Tim Goodwin (Ecology Solutions, witness on behalf of the Appellant). The purpose of this Inquiry Note is to provide additional information in respect of the matters raised.
2. This Inquiry Note has been prepared by Tim Goodwin in conjunction with Philip Branchflower (Stantec) in relation to air quality matters.

Medway Estuary Marine Conservation Zone (MCZ)

3. As outlined in detail in the Information for Habitats Regulations Assessment (CD 5.13), the Medway Estuary has been designated as a Special Protection Area (SPA), Ramsar site, and Site of Special Scientific Interest (SSSI).
4. The Medway Estuary is also designated as a Marine Conservation Zone (MCZ). As illustrated at Appendix 1 of this Note, the boundary of the MCZ is largely contiguous with the SPA, Ramsar site and SSSI, but also includes inshore habitats below the mean low water mark, which are not covered by the SPA and Ramsar site designations.
5. It is important to note that MCZs do not constitute European designated sites or European offshore marine sites. Moreover, MCZs are not given the same level of protection as European designated sites under planning policy¹. Further information in relation to this designation is given below.
6. MCZ are designated under the Marine and Coastal Access Act 2009. In line with Section 117 of the Act, MCZ may be designated for the purpose of conserving marine flora and fauna, marine habitats or types of marine habitat or features of geological or geomorphological interest.

¹ In line with paragraph 176 of the National Planning Policy Framework, potential Special Protection Areas, possible Special Areas of Conservation, listed or proposed Ramsar sites and sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation and listed or proposed Ramsar sites should be given the same protection as habitats sites.

7. As outlined in the Medway Estuary Marine Conservation Zone Designation Order 2013, a copy of which is included at Appendix 2 of this Note, the Medway Estuary MCZ supports a total of nine 'protected features':
- Intertidal mixed sediments;
 - Intertidal sand and muddy sand;
 - Low energy intertidal rock;
 - Subtidal coarse sediment;
 - Subtidal mud
 - Subtidal sand;
 - Estuarine rocky habitats;
 - Peat and clay exposures; and
 - Tentacled Lagoon-worm *Alkmaria romijni*
8. In 2019 one additional protected feature was added to the MCZ: Smelt *Osmerus eperlanus*.
9. The distribution of these protected features within the MCZ are illustrated on Feature Maps produced by the Department for Environment, Food and Rural Affairs, a copy of which is included at Appendix 3 of this Note.
10. For the reasons outlined in detail in the Information for Habitats Regulations Assessment report (CD 5.13), as supplemented by the Drainage Strategy Note (CD 6.8) and IHRA Addendum (CD 6.9), the Appeal Proposals will not result in any direct or indirect effects to the Medway Estuary and Marshes SPA or Ramsar site via pathways such as lighting, noise, air quality or hydrology, either whether the scheme is considered alone or in combination with other plans and projects. Furthermore, following the adoption of a package of measures agreed with Natural England, potential effects upon these designated sites arising through an increase in recreational pressure will also be fully mitigated.
11. Given that the protected features associated with Medway Estuary MCZ are restricted to habitats and species which occur below the mean high water mark, for the reasons outlined in the IHRA it can also be robustly concluded that the Appeal Proposal would not lead to any adverse effects upon the protected features associated with this designated site.
12. Moreover, as mentioned during the Inquiry, no concerns were raised by Natural England in relation to Medway Estuary MCZ at any stage during pre-application discussions or during subsequent consultations throughout the course of the application. The Inspector and Secretary of State will note that the statutory authority does not have any concerns in respect of this designation.

Air Quality

13. As outlined in paragraph 5.139 of the Information for Habitats Regulations Assessment (CD 5.13), air quality modelling work was originally undertaken utilising version 8.0.1 of the Emissions Factors Toolkit (EFT), to ascertain whether the Appeal Proposal would be likely to lead to effects upon the European designated site via air quality pathways.
14. During the Inquiry, a query was raised by the Inspector as to whether updated air quality modelling work has been undertaken using the latest version of the EFT (version 10.0.1), which was released in August 2020, and if so whether this has

any implications in relation to the assessment of potential effects in relation to European designated sites.

15. As outlined in the Note entitled "*Air Quality – Update and Response to EHO Concerns*" (Stantec, January 2021), included at Appendix 8 of Mr Parr's Proof of Evidence, air quality modelling work was indeed revisited by Stantec in January 2021 to incorporate the latest air quality data, with version 10 of the EFT used to calculate emissions.
16. As noted in paragraph 3.20 of the Technical Note, the revised assessment is based on more up to date data which has been shown to be more consistent with actual changes in concentrations shown at roadside locations and is therefore expected to provide a more realistic prediction of future concentrations than the 2019 modelling assessment.
17. In summary, the revised assessment, which utilised version 10 of the EFT, predicts a lower impact on ecological receptors than the 2019 assessment which had used version 8 of the EFT, in part due to improved controls of emissions of NO_x from diesel cars and Light Goods Vehicles (LGVs) alongside predictions regarding fleet renewal.
18. As such, as stated in paragraph 3.19 of the Technical Note, for the reasons outlined in Section 6 of the Information for Habitats Regulations Assessment, it can properly be concluded that the Appeal Proposal is not likely to lead to any adverse effect on the integrity of the European designated site, either considered alone or in combination with other plans or projects as a result of air quality issues.
19. A further query was also raised by the Inspector regarding the modelling timescales, on the basis that air quality effects had been modelled to 2029 whilst the project programme would mean that the new development is anticipated to still be in the process of being constructed until at the very earliest 2031, and whether this would have implications regarding potential for future effects.
20. From the outset, it is important to note that modelling of future years would lead to lower emissions figures and background concentrations due to committed Government policy interventions. As a result, potential impacts arising as a result of the Appeal Proposal in 2031 would, in fact, be lower than those identified from the modelling work in 2029.
21. In addition, a conservative but realistic approach has been adopted throughout the course of the air quality work undertaken. As outlined in the Technical Note at Appendix 8 of Mr Parr's Proof, the revised air quality modelling work has utilised 2029 as the 'traffic data year', and therefore includes for both traffic growth and anticipates full development traffic at this date, notwithstanding the fact that the new development may not be fully built and occupied by this date. This ensures that the 'likely maximum' traffic movements are assessed. The revised air quality modelling work has also utilised this data in conjunction with 2025 pollutant emissions, thereby building in additional conservative assumptions.
22. As a result, it is respectfully considered that the Inspector and Secretary of State should be reassured that the air quality modelling work undertaken represents a robust and adequately precautionary approach towards potential effects that could arise in respect of the European designated sites.

23. A proposed condition requires the air quality data to be updated during the stages of the reserved matter applications. In that sense air quality will continue to be assessed as the project moved forward. In parallel, each reserved matter application would be a 'plan or project' for the purposes of the Habitats Regulations and as such the air quality modelling work together with any other issues, including detailed drainage would be further assessed and considered via updated HRAs.
24. During the Inquiry, the Inspector also invited examples of measures that will be delivered as part of the new development that may assist with air quality.
25. As noted in the Inquiry, the provision of electrical vehicle charging points is anticipated to assist in delivering air quality improvements, by facilitating increased ownership of electric vehicles by new residents.
26. The potential source of emissions arising to air from development of the same type as the Appeal Proposals are also largely limited to combustion processes (i.e. vehicles and heating plant). As a result, measures to reduce greenhouse gas emissions would also provide mitigation in respect of air quality impacts. Such measures are outlined in Section 4.6 of the '*Sustainability and Climate Change Appraisal*' (Stantec, January 2021) included at Appendix 9 of Mr Parr's Proof of Evidence.

Tim Goodwin
Philip Branchflower

26 February 2021