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Basildon Local Plan

Habitat Regulations Assessment Second Addendum

Prepared by LUC
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Project Title: Basildon Local Plan HRA Second Addendum

Client: Basildon Borough Council

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1.0	19/02/2020	Final Draft	Rebecca Turner	David Green	David Green

Introduction

Background

- 1.1 This Habitat Regulations Assessment (HRA) addendum has been produced in response to changes in the baseline evidence used to assess the submitted Local Plan before considering the effects on the conclusions reached in the HRA report published in October 2018 alongside the publication of Basildon Local Plan. Further details on the nature of the changes and their implications are set out below.

Air Quality

- 1.2 In July 2017, the Department for the Environment, Food and Rural Affairs (Defra) issued Basildon Borough Council (BBC) and Rochford District Council with a Direction in respect of the Air Quality Framework Directive¹. The Direction required the preparation of an Air Quality Management Plan (AQMP) to address three recorded exceedances in NO₂ levels on the A127² identified by the Pollution Climate Mapping (PCM) model. The PCM model predicted three locations along the A127 route in Basildon and Rochford likely to continue to exceed the NO₂ annual mean EU Limit Value of 40 µg/m³ beyond 2020.

Table 1 – PCM NO₂ exceedances along A127

Location	Authority	2018 NO ₂	2020 NO ₂
Fortune of War Junction	Basildon Borough	50	45
Noak Bridge Junction	Basildon Borough	51	46
Rayleigh Weir Junction	Rochford District	49	45

- 1.3 Whilst the data provided by this model gives an overview of the scale of the air quality issue along the route, the model is at a national level so there is potential for discrepancies between the modelled results and the extent of the actual problem on the ground. Therefore, Essex County Council (ECC) in conjunction with Ringway Jacobs undertook some more detailed modelling in 2018 and 2019 to confirm the scale and location of the exceedances. The local modelling identified no exceedance at the Fortune of War Junction and Rayleigh Weir Junction but identified two points of exceedance at the Noak Bridge Junction and an additional point of exceedance at A127/A132 Nevendon Interchange.

¹ Directive 2008/50/EC on ambient air quality and cleaner air for Europe: <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1486474738782&uri=CELEX:02008L0050-20150918>

² Defra Direction (July 2017):

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/746095/air-quality-no2-plan-directions-2017.pdf

Table 2 – Essex County Council Model NO₂ exceedances along A127

Location		Authority	2018 NO ₂	2020 NO ₂
Noak Bridge Junction	A176, Upper Mayne Road	Basildon Borough	49.2	43.8
	A127	Basildon Borough	46.5	42.6
Nevedon Interchange		Basildon Borough	49.9	46.7

- 1.4 The ECC model was used to calculate the total daily reduction in vehicles required to meet the required NO₂ limit value by 2020: 22,484. This figure was used as the basis for identifying appropriate measures to reduce traffic flows on the A127 through the AQMP.
- 1.5 A business case for the implementation of a preferred AQMP was submitted to Defra in May 2019³. The business case explored three main mitigation packages:
1. **Speed limit reduction scheme:** A 50mph speed limit along the A127 from the Fortune of War Junction to Pound Lane Junction. Businesses within the zone would be offered advice and support on upgrading to cleaner vehicles and installing electric charging points and cycle parking. They would be encouraged to cycle, walk and use public transport more in their daily commutes.
 2. **A non-charging Clean Air Zone (CAZ):** A defined area where targeted action is taken to improve air quality, including funding local businesses within the zone to upgrade their fleet of vehicles using cleaner technologies.
 3. **A charging CAZ:** A charging CAZ discouraging specific types of vehicle from travelling along the A127. A charging CAZ would displace traffic onto other routes and create new non-compliances in those areas. Any traffic displacement away from the business areas would be into residential areas. This could increase both the air quality non-compliances and the road traffic collision rates.
- 1.6 The preferred AQMP to address NO₂ exceedances included the speed limit reduction scheme on the A127 in combination with a non-charging CAZ. In June 2019, Defra issued a new direction to BBC to implement the speed limit reduction scheme on the A127 as soon as possible, but to undertake further air quality and transport modelling to demonstrate what measures would need to be implemented by the authorities to deliver compliance quicker than 2023 at the exceedance locations including consideration of a small charging CAZ and/or access restriction (charge or ban) for HGVs.⁴
- 1.7 An updated business case for the speed reduction scheme⁵ on the A127 was submitted to Defra by ECC in October 2019 but Defra has yet to respond. The speed reduction scheme was rolled out in March 2020. However, at this point in time (March 2020) it is unknown whether the suite of additional measures required to deliver compliance will include the non-charging measures modelled in the original business case prepared by ECC, a small charging CAZ, access restrictions or a combination of these additional schemes.
- 1.8 In relation to the HRA, air pollution is most likely to affect European sites where plant, soil and water habitats are the qualifying features, but some qualifying animal species may also be affected, either directly or indirectly, by deterioration in habitat as a result of air pollution. Deposition of pollutants to the ground and vegetation can alter the characteristics of the soil,

³ Outline Business Case (ECC, May 2019): <http://www.basildonmeetings.info/documents/s103054/LOCAL%20AIR%20QUALITY%20MINISTERIAL%20DIRECTION%20-%20APPROVAL%20OF%20OUTLINE%20BUSINESS%20CASE%20enc.%202.pdf>

⁴ Defra Direction (June 2019): https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/813209/air-quality-direction-basildon-2019.pdf

⁵ Full Business Case (ECC, October, 2019)

affecting the pH and nitrogen levels, which can then affect plant health, productivity and species composition.

- 1.9 In terms of vehicle traffic, nitrogen oxides (NO_x, i.e. NO and NO₂) are considered to be the key pollutants. Deposition of nitrogen compounds may lead to both soil and freshwater acidification, and NO_x can cause eutrophication of soils and water.
- 1.10 Based on the Highways Agency Design Manual for Road and Bridges (DMRB) Manual Volume 11, Section 3, Part 114 (which was produced to provide advice regarding the design, assessment and operation of trunk roads including motorways), it is assumed that air pollution from roads is unlikely to be significant beyond 200m from the road itself. Where increases in traffic volumes are forecast, this 200m buffer needs to be applied to the relevant roads in order to make a judgement about the likely geographical extent of air pollution impacts.
- 1.11 The DMRB Guidance for the assessment of local air quality in relation to highways developments provides criteria that should be applied at the Screening Stage of an assessment of a plan or project, to ascertain whether there are likely to be significant impacts associated with routes or corridors. Based on the DMRB guidance, affected roads which should be assessed are those where:
- Daily traffic flows will change by 1,000 AADT (Annual Average Daily Traffic) or more; or
 - Heavy duty vehicle (HDV) flows will change by 200 AADT or more; or
 - Daily average speed will change by 10 km/hr or more; or
 - Peak hour speed will change by 20 km/hr or more; or
 - Road alignment will change by 5 m or more.
- 1.12 Where significant increases in traffic are possible on roads within 200m of European sites, traffic forecast data may be needed to determine if increases in vehicle traffic are likely to be significant. In line with the Wealden judgment⁶, the traffic growth considered by the HRA should be based on the effects of development provided for by the Plan in combination with other drivers of growth such as development proposed in neighbouring districts and demographic change.
- 1.13 **No European sites lie within 200m of the A127 and therefore it can be concluded that no likely significant effects will occur as a result of the Basildon Local Plan in relation to changes in air quality at A127. The HRA conclusions remain valid.**

Offsite Habitat Loss

- 1.14 Previous iterations of the HRA of the Regulation 19 Local Plan identified lapwing as a qualifying species of the Thames Estuary and Marshes SPA. This was based on erroneous information that was presented on the JNNC website⁷. Following a further review of relevant data sources, including Standard Data Form⁸ and Natural England's Site Improvement Plans and Conservation Objectives, it was confirmed that lapwing was not a qualifying species of the SPA and therefore does not need to be considered as part of the HRA.
- 1.15 The Thames Estuary and Marshes SPA supports other qualifying bird species. Natural England has advised that the recognised foraging distance threshold for the majority of wetland bird species (excluding golden plover and lapwing) is 2km from the designated site. Based on this and as the SPA is situated over 2km outside of the borough, **it can be concluded that no likely significant effects will occur from the Basildon Local Plan as a result of loss of offsite habitat in relation to Thames Estuary and Marshes SPA.**

⁶ Wealden v SSCLG [2017] EWHC 351 (Admin)

⁷ <http://archive.jncc.gov.uk/default.aspx?page=2042>

⁸ <http://publications.naturalengland.org.uk/publication/3227002>

Conclusion and Next Steps

- 1.16 The HRA Addendum has considered whether the findings of the HRA, which accompanies the Regulation 19 Local Plan would be altered following changes to the baseline evidence. Following a review of these changes, it was found that the changes detailed above will not alter the conclusion of the HRA in relation to air quality.
- 1.17 In contrast, there are notable changes to the conclusion of the HRA in relation to offsite habitat loss. Earlier iterations of the HRA identified lapwing as a qualifying feature of the Thames Estuary and Marshes SPA. As it was confirmed that this species is not a qualifying feature of this, or other, European sites and as other qualifying features of the SPA were not considered susceptible to impacts from proposed development within the plan, it can be concluded that no likely significant effects will occur as a result of offsite habitat loss in relation to the Thames Estuary and Marshes SPA. This update of the assessment is not considered to affect the Regulation 19 Local Plan.

Consultation with Natural England

- 1.18 In addition to this above, BBC have consulted with Natural England in October 2018 on the Regulation 19 Local Plan and the accompanying HRA. From the consultation, Natural England stated the following:
- "Natural England commends your contribution and commitment to the Essex Recreation and Access Management Strategy ('RAMS') and in broadly agrees with the Habitats Regulation Assessment conclusion that adverse effects on integrity on the Essex Coastal Natura 2000 sites can be ruled out as a result. We have, however, raised a few concerns and would be keen to engage with you prior to examination to ensure that all policy wording is robust and effective and agree a statement of common ground."*
- 1.19 At this stage, BBC are in discussion with Natural England on the proposed changes to policy wording in the Local Plan. Once, this has been updated the Local Plan will be reviewed at the main modifications stage to determine whether the conclusions of the HRA remain valid.

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