



NRE 4.1

# **Summary Proof of Evidence – Noise (Mr Simon Taylor)**

**Inquiries Procedure (England & Wales) Rules 2004**

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The Network Rail (Cambridge South Infrastructure Enhancements) Order

Proof of Evidence



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## **1. Summary**

- 1.1 I am Simon Taylor. I am a Director of Acoustics at Ramboll UK Limited, where I have worked since 2016. My credentials and role on the CSIE Project are described in my Proof. I was involved in the design of a number of developments on the Cambridge Biomedical Campus ("**CBC**")
- 1.2 This is a summary of my Proof (**NRE4.2**) prepared to support Network Rail (NR) with seeking deemed planning permission for the Cambridge South Infrastructure Enhancements (CSIE) scheme ("**CSIE Project**").
- 1.3 I have been involved in the design of a number of rail schemes and projects where construction noise had the potential to impact extremely noise sensitive receptors and also in the design of a number of developments on the Cambridge Biomedical Campus ("**CBC**").
- 1.4 My role on the proposed CSIE Project started in September 2021, providing acoustic advice to Network Rail and preparation of this Proof.

## **Scope and Purpose of this Proof of Evidence**

- 1.5 This Proof addresses the impact of the proposed construction and operation of the CSIE Project on the nearby noise sensitive receptors and public amenity space.
- 1.6 My proof of evidence provides:
  - a) an overview of the CSIE project and key noise aspects
  - b) the legislative and policy context
  - c) background to the stakeholder engagement undertaken through the Environmental Statement ("**ES**") (**NR16**) and since submission of the proposed TWA0 (**NR1** and **NR2**)
  - d) a Summary of the ES noise assessment and the noise assessment methodology
  - e) ES findings for the receptors with a predicted significant adverse impact
  - f) The noise related objections raised relating to the proposals and a response to the specific aspects raised in the Objectors' statements of case
  - g) Conclusions and my Declarations

- 1.7 **Appendix A** sets out a glossary of acoustic terms and an explanation of some of the terminology used in the evidence.
- 1.8 **Appendix B** sets out my proposed acceptable internal noise criteria for areas of the Medical Research Council Laboratory of Molecular Biology ("**MRC LMB**") and the University of Cambridge Anne McLaren Building ("**UoC AMB**") that house animals based on the available Home Office guidance,. These are proposed in absence of any specific criteria from the UoC AMB and MRC LMB, and I believe them to be an accurate basis to assess noise effects upon such animals.
- 1.9 These criteria are then used within **Appendix B** to assess the significance of effects upon the animals housed in the MRC LMB and UoC AMB based upon the construction noise levels predicted in the ES Chapter 5.
- 1.10 **Appendix C** sets out an easy to understand methodology for considering whether the external construction noise levels, in terms of the 'maximum' noise levels ( $L_{AFmax}$ ), are likely to result in significant effects due to noise within any noise sensitive research areas of the LMB and AMB.
- 1.11 I have prepared my own assessment of maximum noise levels ( $L_{AFmax}$ ) from the noisiest proposed construction activity, concrete breaking, to the facades of the LMB and AMB.

### **Legislation and Guidance**

- 1.12 The noise impact assessment has been undertaken in accordance with current national legislation and guidance as well as local plans and policies relating to noise in the context of the proposed development. This includes the agent of change principle described in the National Planning Policy Framework (2021).

### **Pre-application Engagement.**

- 1.13 In my Proof I list out all of the consultees and consultation undertaken by Arcadis for NR before the TWA0 submission. This includes discussions with Cambridge City Council ("**CCiC**") and South Cambridgeshire District Council ("**SCDC**").

### **Post Submission Engagement**

- 1.14 Following the submission of the TWA0 application, engagement sessions relating to noise have been held with the UoC and MRC and their appointed consultants. The details of these consultations are set out in my Proof.

### **Summary of the ES Noise Assessment**

- 1.15 My Proof provides an overview of the noise assessment set out in Chapter 5 of the ES.
- 1.16 Short term noise and effects have the potential to arise as a result of the construction and operation of the new station.
- 1.17 The ES assesses the likely significance of these effects as a result of the construction and operation of the proposed scheme in terms of noise in the immediate community. The assessment makes reference to legislation, local and national policy and relevant guidance.

- 1.18 The impact of noise from construction activities and its significance are assessed at each sensitive receptor based on the predicted noise level. The operational noise impact, and significance, are assessed at each sensitive receptor based on the change in anticipated noise level. Finally, mitigation for construction effects is discussed.
- 1.19 The outcome of the construction noise assessment in Chapter 5 of the ES is that following the mitigation, in the form of Best Practicable Means ("**BPM**"), construction noise is considered to have a Moderate impact during the day and significant adverse effects on the AstraZeneca Academy House, The Belvedere, Long Road, MRC LMB, Astra Zeneca Biomed, and UoC AMB receptors. These are considered in greater detail in Section 9 of my Proof.
- 1.20 It is my opinion that whilst significant adverse effects are predicted at the AMB and LMB during construction, this will not result in significant adverse effects upon research activities or the behaviour of animals housed in the buildings. This is demonstrated in Section 10 of my Proof, and is broadly because maximum external noise levels from construction are no higher than the existing maximum noise levels from passing trains and these are sufficiently mitigated by the existing façade.
- 1.21 The outcome of the operational noise impact assessment in Chapter 5 of the ES is that the CSIE Project will not result in significant adverse impacts at any receptors.

### **Objections and Comments Raised**

- 1.22 Objections have been received on the grounds of noise, and in particular noise during the construction period, from the MRC LMB and the UoC AMB on their research operations. A high-level and speculative noise concern has been raised by the Cambridge Past, Present and Future ("**Cam PFF**") as part of their objection to the scheme which I address at 10.4 of my Proof. Objections referencing noise have also been received from SCDC and CCiC.
- 1.23 My response to MRC (OBJ09) and UoC (OBJ03) is that where noise levels from construction are not significantly higher than the pre-existing measured noise levels (which in this case, for UoC and AMB includes the existing noise from the pre-existing train lines), no adverse effect to research is likely to occur. This is because the research activities are currently being undertaken subject to those pre-existing noise levels.
- 1.24 I have prepared my own assessment comparing the maximum ( $L_{AFmax}$ ) noise level from the noisiest construction activity (concrete breaking) with the pre-existing measured maximum noise levels, (typically from passing trains). I conclude that the very worst case maximum ( $L_{AFmax}$ ) noise levels from construction are similar if not lower than the noise levels from the existing trains at both the facades of the LMB and AMB.

### **MRC (OBJ09)**

- 1.25 The two key concerns raised by the MRC are as follows and are dealt with in section 10.2 of my proof:
- 1) Risks of effects upon the behaviour of their animals, in particular mice (dealt with in paragraphs 10.2.1 onwards and Appendix B). My opinion is that they will not be significantly

adversely affected because the predicted construction noise levels will not exceed the pre-existing maximum noise levels.

- 2) Concern that Chapter 5 of the ES predicts significant adverse effect at the facade of the LMB (dealt with in paragraphs 10.2.43 onwards). The ES however does not assess impacts on noise within LMB, and the expected impact within the LMB is not expected to be significantly adverse.

## **UoC (OBJ08)**

1.26 UoC raise six concerns which can be grouped as follows and are dealt with at 10.3 of my Proof. In summary, I assess the current external maximum noise levels up to to 83dBL<sub>AFmax</sub> and occasional maximum noise levels up to 88 dBL<sub>AFmax</sub> at relevant receptors. The construction noise levels of 67 dBL<sub>Aeq</sub> and occasionally up to 80 dBL<sub>AFmax</sub> from the construction of the CSIE Project would not impact research activities within the AMB. In greater detail their objections concern:

- 1) Effects on their operations (namely on their equipment (1), animals (2) and internal criteria (6) which may be exceeded), which I do not accept because the maximum construction noise levels will be at a lower level and less frequent than the pre-existing maximum noise levels.
- 2) Lack of consideration of mitigation beyond BPM (3). I do not agree with this objection because appropriate BPM is sufficient to limit construction noise, without further mitigation.
- 3) Two further technical points (blanket inclusion of 5dB (4) and measurement of noise levels at façade (5)) and are dealt with at section 10.3 of my proof.

## **CCiC and SCDC**

1.27 CCiC and SCDC identify a number of concerns which they propose should be dealt with by way of planning condition. I consider them to be reasonable, and they have been accepted by Network Rail. They are dealt with at 10.5 and 10.6 of my Proof. CCiC has also sought confirmation that impact piling will not be used, and Network Rail has confirmed that it will not.

## **Overall Conclusion**

1.28 Based upon the assessments and conclusions within the ES and the additional assessments within my Proof of evidence I consider that noise from the construction and operation of the proposed CSIE is highly unlikely to cause adverse effects to research being undertaken in the UoC AMB and the MRC LMB. The reason being that the maximum construction noise levels (L<sub>AFmax</sub>) are predicted to be no higher and no more frequent than the pre-existing measured maximum noise levels (L<sub>AFmax</sub>) at the facades of the LMB and AMB.