

**SUMMARY PROOF OF EVIDENCE OF  
MICHAEL FRASER**

**NOISE AND VIBRATION**



**THE CHILTERN RAILWAYS (BICESTER TO OXFORD IMPROVEMENTS) ORDER**

**TRANSPORT AND WORKS ACT 1992**

**TRANSPORT AND WORKS (APPLICATIONS AND OBJECTIONS PROCEDURE)  
(ENGLAND AND WALES) RULES 2006**



**FINAL**

**27 SEPTEMBER 2010**

# 1 SUMMARY PROOF OF EVIDENCE OF MICHAEL FRASER

## INTRODUCTION

- 1.1 My name is Michael Fraser and I hold a Degree in Electroacoustics from the University of Salford, am a Member of the Institute of Acoustics and have more than 20 years experience in the field of environmental noise. I am a Principal Consultant with Environmental Resources Management (ERM) and in that capacity I am responsible for assessing environmental noise effects from a wide range of developments, including noise and vibration effects from railway systems.
- 1.2 I am responsible for the noise and vibration assessment of the Chiltern Railways (Bicester to Oxford Improvements) Order Scheme (“the Order Scheme”).

## STATEMENT OF MATTERS

- 1.3 The Secretary of State for Transport (‘the Secretary of State’) issued a Statement of Matters for the TWA Inquiry on 25 August 2010. In this Proof of Evidence, I address, in particular, the following matter from that Statement of Matters, in whole or in part:
- 1.4 “5. The likely impact on local residents, businesses and the environment of constructing and operating the Order Scheme, including:
- (a) “noise and vibration”.
- 1.5 Noise impacts to ecology regarding matter 10 (e) from the Statement of Matters is addressed, in whole or in part, in Andy Coates’ Proof of Evidence (CRCL/P/10/A). This matter is stated as follows:
- 1.6 “10. The measures proposed by Chiltern Railways for mitigating any adverse impacts of the Order Scheme, including:
- (e) whether, and if so, to what extent, any adverse environmental impacts would still remain after the proposed mitigation”.
- 1.7 In this Summary Proof of Evidence of Michael Fraser I present a summary of evidence in relation to Statement of Matters 5 (a) and my conclusions.

## THE ES ASSESSMENT

- 1.8 The Noise and Vibration assessment in the ES represented a robust assessment using well established methodology. It demonstrated the extent and severity of potential noise and vibration impacts and set out the basis of an effective mitigation strategy.

## **FURTHER NOISE ASSESSMENT – POST ES SUBMISSION**

- 1.9 Although the ES included a thorough and robust assessment of existing noise levels and robustly predicts the likely effects of the railway, further work has been undertaken to refine knowledge of the spatial scope of the noise impacts that will result from the Order Scheme, and the required mitigation. This is typical of such scheme development and development of, and debate regarding, mitigation of impacts does not stand still. This work has involved further noise monitoring and noise modelling which are discussed in Section 4.2 and 4.3 of the my main proof of evidence (**CRCL/P/9/A**). Baseline vibration monitoring has also been carried out and is detailed in Section 4.3 of my main proof of evidence.

## **RESOLUTION OF NOISE AND VIBRATION OBJECTIONS**

- 1.10 Chiltern Railways is going beyond what the law strictly demands of them by operating a modern and highly desirable railway service, by offering mitigation at noise levels below statutory noise levels. Mitigation is to be provided following the procedures described in the ES and which are set out in the Draft Noise and Vibration Policy which is subject to Network Rail review and will be made available to the Inquiry. The Noise and Vibration policy will be enforced through a planning condition which will make it legally binding and will provide an objective method to ensure noise and vibration mitigation is provided on a fair basis for all residents affected by the Order Scheme.
- 1.11 However, despite the proposed mitigation a total of 308 objections to the Project were received, of which 152 specifically mentioned concerns regarding noise and/or vibration.
- 1.12 The 100 residents who submitted their objection to the Order Scheme by sending in a standard list of concerns (the standard tick sheet) received standard answers in response, which cover the majority of residents' concerns regarding the effects of the Order Scheme. This standard letter is included in the Appendix to my main proof of evidence (**CRCL/P/9/B**). Following the issue of this letter a follow up letter has been sent in order to establish if there were outstanding concerns.
- 1.13 Where specific technical questions have been raised, response letters have been sent to attempt to answer these concerns.
- 1.14 Chiltern Railways also undertook consultation with groups of residents and Oxford Councillors and had contact with individual Objectors by meetings and telephone in order to understand the concerns and provide appropriate responses.
- 1.15 Despite consultation with Objectors above, there are still some Objectors who have concerns regarding noise and vibration. Thirty five Objectors who are concerned about noise and vibration have informed the Programme Officer that they intend to attend the public inquiry, of which, 16 have submitted a Statement of Case.
- 1.16 Key points raised in the Objectors' Statement of Case are presented in my main proof of evidence (**CRCL/P/9/A**). Responses to the key points relating to

noise and vibration are presented for each Objector. To avoid repetition cross references have been made to similar points of Objection, where relevant.