DR. NORMAN JORGENSEN

WRITTEN REPRESENTATION

HIGHWAYS ENGLAND'S RESPONSE

ADDITIONAL COMMENTS FROM NORMAN JORGENSEN

1.1 I would like to make the following additional submission in relation to the Highways England Application for an Order Granting Development Consent for the M4 Junctions 3 to 12 Smart Motorway (Case ref TR010019).

1.2 "During the Accompanied Site Visit in Earley on Tuesday 10 November and at Open Floor Hearing 1 on Monday 16 November I was asked by the Planning Inspector to provide a list of the properties in Earley that I felt are most badly affected by noise.

1.3 There are many properties in Earley affected by noise because of the topography of the area. Earley is a Town of population approximately 30,000 people and approximately 13,000 dwellings. Around a third of the Town is close to and on a slope rising from the motorway hence there are people some way from the motorway that experience high levels of noise if they are not screened by other houses or natural features.

Highways England Comment

1.3.1 The operational noise assessment for the M4 Junctions 3 to 12 Smart Motorway scheme (the "Scheme") is based on the calculation of noise levels with the Scheme ("Do Something") and without the Scheme ("Do Minimum") in place. The change in noise levels resulting from the Scheme can then be estimated.

1.3.2 The calculations are implemented in a complex three dimensional computer model which takes into account the changes in ground height within the study area and the noise shielding (or not) provided by buildings and landforms.

1.3.3 As such, the circumstances mentioned in the representation have been taken into account in the noise assessment for the Scheme.

1.4 The level of noise is also very dependant on ambient weather conditions. It is worse when the wind is blowing from the motorway across Earley, ie from the South West, the prevailing wind direction, and when the road is wet.

Highways England Comment

1.4.1 The noise assessment uses the Calculation of Road Traffic Noise ("CRTN") methodology to calculate road traffic noise levels, as required by paragraph 5.191 of the National Policy Statement for National Networks ("NNNPS"). The CRTN methodology provides a reasonable worst case and assumes a moderate wind to be blowing from the noise source (i.e. any section of road) to all receptors in the study area, wherever those receptors are located in relation to that noise source.

1.4.2 The CRTN methodology does not account for the effects of a wet road surface on noise levels. Highways England agrees that traffic on a wet surface is noisier than

on a dry surface. However, the effects of a wet road surface would exist in the Do Minimum scenario (i.e. without the Scheme) as well as in the Do Something scenario (i.e. with the Scheme). Consequently, the change in noise level, which is the metric used to assess the effects of the Scheme, will be roughly comparable for a wet road surface and a dry road surface.

1.5 I live more than half a mile from the motorway and have hundreds of houses between there and the motorway and still have to close my door at times to keep out noise from the M4.

The houses closest to the motorway with little or no protection from noise are in the housing estates off Ryhill Way and off Bradmore Way. More specifically I believe the worst affected houses are those at 28-34 Finbeck Way (RG6 4AH) and 30 to 40 Notton Way (RG6 4AJ). Standing in front of these properties there is direct line of sight to the vehicles going by on the motorway.

1.6 Other properties in the vicinity are close behind and these include 39-67 Maltby Way, 5-8 Heacham Close, 42-64 Notton Way, 7-12 Tickhill Close, 17 Worrall Way, 23-27 Bradmore Way, 11-25 Rainworth Close, 1-5 Farnsfield Close and properties in Cutbush Close and Redhouse Close.

1.7 I will be happy to take the Planning Inspectors and/or Highways England to these locations if that would help.

Highways England Comment

1.7.1 As reported in Chapter 12 of the Environmental Statement ("ES") (Application Document Reference 6-1, APP-152), the magnitude of impact of the Scheme on ambient noise is minor beneficial in the short term and negligible in the long term. The vast majority of the Scheme corridor will experience a negligible or minor reduction in noise levels with the Scheme in operation.

1.7.2 Sheet 4 of Drawing 12.4 (Application Document Reference 6-2, APP-266) shows the noise reductions across the Lower Earley area resulting from the operation of the Scheme on opening. Sheet 4 of Drawing 12.5 (Application Document Reference 6-2, APP-270) shows the noise reductions across the Lower Earley area resulting from the operation of the Scheme in the long term. These drawings confirm that Lower Earley will experience similar noise impacts to those described above in relation to the whole Scheme.

1.7.3 Highways England also confirms that Lower Earley was included within the enhanced noise mitigation study that, as described in paragraph 12.4.112 of the ES, was carried out to examine the potential to improve further the noise climate within the Scheme corridor. The qualitative appraisal of the enhanced noise mitigation study is provided in Appendix 12.5 of the ES (Application Document Reference 6-3, APP-351). This enhanced noise mitigation study comprises the possible provision of additional noise barriers and the possible replacement of some existing noise barriers with higher noise barriers.

1.7.4 The quantitative assessment for the enhanced noise mitigation study is based on a detailed cost/benefit analysis, the results of which are provided with the submission at Deadline V.

1.7.5 Highways England confirms that the Lower Earley area was subject to the assessment undertaken as part of the enhanced noise mitigation study. The confirmed barrier provision in this area is detailed within Appendix E of the Enhanced Noise Mitigation Study Report (Ref 514451-MUH-00-ZZ-RP-EN-400158), Sheet 4 is relevant to the Lower Earley area.

1.7.6 The results of the enhanced noise mitigation study show that an additional 2126 metres of 2.5 metre high noise barrier is to be provided adjacent to Lower Earley. The provision of this mitigation will provide further noise decreases to properties in Lower Earley, in addition to the minor noise decreases on Scheme opening (without enhanced mitigation) presented in Sheet 4 of Drawing 12.4 of the ES (Application Document Reference 6-2, APP-266).

1.8 I welcome the introduction of lower noise surface materials into the scheme but feel more should be done within the scheme to decrease the noise nuisance to residents of Earley and other locations along the proposed scheme. I am encouraged that Highways England is now developing an enhanced noise mitigation strategy and that consideration of noise barriers for the stretch of motorway passing Earley is a priority within that. At the Issue Specific Hearing on the Environment we were told this strategy would be available in three weeks so I look forward to reviewing this. It would be helpful if I can see it prior to Christmas please so I have the opportunity to comment by the January submission deadline."

Highways England Comment

1.8.1 Highways England confirms that the results of the enhanced noise mitigation study have been provided at Deadline V, the results of which are explained above in the response to paragraph 1.7.