

CLIVE JONES

WRITTEN REPRESENTATION

HIGHWAYS ENGLAND'S RESPONSE

This message is from Clive Jones, liberal Democrat Parliamentary spokesman for Wokingham.

- 1. I am concerned that the noise levels along the M4 from junction 10 to 11 have been increasing year on year for the last 35 years that I have lived in and around this area.*
- 2. I and many residents would like the noise levels to return to those of the 1980's and 1990's when many of us bought our houses in Earley and Lower Earley. I understand from conversations with Highways England that data of noise levels and traffic flows from the 1980's and 1990's is not available. Probably because Berkshire County Council was disbanded in 1998. Had this data been available a comparison could have been made with today. I do not think it unreasonable to suggest that traffic levels on this stretch of the M4 have increased 4 or 5 times since the 1980's. Leading to a significant increase in decibels.*

Highways England Comment

- 2.1 Whilst it may not be possible to obtain historic traffic flow data for the M4, the Department for Transport publishes various statistical data sets, one of which is Transport Statistics Great Britain. Table TRA0102: Motor vehicle traffic (vehicle miles) by road class in Great Britain, annual from 1993, and Table TRA0102 (historic) that covers the period from 1950 to 1993, together provide an indicator of traffic growth typically experienced on motorways (these are available to view here, <https://www.gov.uk/government/statistical-data-sets/tra01-traffic-by-road-class-and-region-miles>). The table below provides abstracts from Table TRA0102 for the mid-1980's, the mid-1990's and the latest date available, 2014. From this it can be seen that traffic on motorways had generally grown, from the 1985 baseline, by 1.4 times by the mid-1990's and 2.7 times by the mid-2010's.

Year	Motorway Vehicle Miles (billions)	Growth factor from 1985
1985	23.6	-
1995	45.9	1.4
2014	64.3	2.7

Source: Table TRA102, Traffic Statistics Great Britain

- 2.2 It is therefore not possible to confirm the assertion that traffic flows on the motorway have increased by a factor of 4 or 5 since the 1980's.
- 2.3 In addition to the lack of traffic data from the 1980's, noise data from that period (either based on measurement or on calculation from traffic flows) is also not readily available. It is therefore impossible to confirm that there has been a significant increase in decibel levels. It is stressed that the noise and vibration assessment, as presented in Chapter 12 of the Environmental Statement ("ES") (Application Document Reference 6-1), has been carried out according to the requirements of the Design Manual for Roads and Bridges ("DMRB"). The DMRB approach is based on comparisons of noise levels with and without the Scheme in operation for the opening year and for the year 15 years after opening. However, DMRB does not require comparisons with historical noise levels. Nor is the Scheme required to decrease noise levels to those experienced 25-30 years ago.
3. *Noise from the M4 motorway is a blight on the houses in Earley and Lower Earley. I seems somewhat ridiculous that whilst extensive roadwork's are being undertaken on this stretch of the motorway that noise mitigation measures and improvements in air quality are not done at the same time.*

Highways England Comment

- 3.1 Noise mitigation measures are to be undertaken for the Scheme in the form of low noise surfacing across all lanes, a number of new noise barriers and the replacement of existing barriers on a like-for-like basis if in poor condition.
- 3.2 It is not correct that the Scheme will result in blight to houses in Earley and Lower Earley. The noise assessment, as reported in Chapter 12 of the ES, demonstrates that, the magnitude of impact of noise resulting from the operation of the Scheme is minor beneficial in the short term and negligible in the long term at this location. This

results in an assessment of significance of effect during the operation of the Scheme of slight beneficial in the short term and neutral in the long term (paragraphs 12.6.14 to 12.6.16 in Chapter 12 of the ES (Application Document Reference 6-1)). These noise reductions are shown in Figure 12.4 for the short term, and in Figure 12.5 for the long term (Application Document Reference 6-2). Sheets 3, 4 and 5 of the figures are relevant to the areas referred to in this written representation. The noise decreases resulting from the operation of the Scheme are evident from the drawings.

- 3.3 The locations and extents of existing noise barriers and the new noise barriers proposed as part of the Scheme are provided in Figure 12.2 of the ES (Application Document Reference 6-2).
- 3.4 In relation to the stretch of motorway between junction 10 and junction 11, there are already existing noise barriers to Whitley Wood, Sindlesham and Winnersh. There are no existing noise barriers to Shinfield, Earley/Lower Earley or Emmbrook. Contrary to the suggestion in the representation, additional noise mitigation is being provided as part of the Scheme. In addition to the low noise surfacing being provided across all lanes of the M4, additional noise barriers are proposed between junction 10 and junction 11, where the M4 motorway crosses over Mill Lane at Sindlesham, as shown on Sheet 5 of Drawing 12.2 (Application Document 6-2). Given that the Scheme is anticipated to result in a reduction in noise, no further mitigation is required.
- 3.5 In addition, with regards to air quality, it should be noted that all sensitive receptors identified in the air quality assessment (Chapter 6 of the ES (Application Document Reference 6-1)) in Lower Earley are predicted to experience annual mean concentrations below the objective value ($40 \mu\text{g}/\text{m}^3$) both with and without the Scheme in the Opening Year (2022); the location of these receptors is presented on Figures 6.4 and 6.4a of the ES (Application Document Reference 6-2).
- 3.6 Across the whole study area there will generally be a slight increase in air pollution as a result of the Scheme. However, the overall assessment of effects indicates that air quality effects are not significant, both along the length of the Scheme and on the local road network. This evaluation is based on the Interim Advice Note (IAN) 174/13 'Evaluation of Significant Local Air Quality Effects'. Therefore, there is no requirement for further mitigation to provide air quality improvements to mitigate the Scheme's air quality effects.

4. *I very much welcome the news that all 8 lanes will have “low noise tarmac”. This news was given to me after discussions with HA employees at roadshows in October/November 2014. I hope that more can be done. There is the option to enhance the noise mitigation measures and I hope you will take this opportunity to do so if Highways England do not do this themselves.*

Highways England Comment

- 4.1 Highways England has identified potential to improve further the noise climate within the Scheme corridor through enhanced mitigation, as noted in paragraph 12.4.112 of the ES (Application Document Reference 6-1). A qualitative appraisal of an enhanced mitigation strategy to achieve this is provided in Appendix 12.5 of the ES (Application Document Reference 6-3). This enhanced mitigation strategy comprises the provision of additional noise barriers, as outlined in Table A12.5.1 of Appendix 12.5 of the ES and the replacement of some existing noise barriers with higher noise barriers as outlined in Table A12.5.2 of Appendix 12.5 of the ES.
- 4.2 A quantitative assessment of this enhanced mitigation strategy is currently being carried out based on a cost benefit analysis for each group of sensitive receptors. Highways England is carrying out an assessment of potential benefits of new noise barriers to Shinfield and Earley/Lower Earley, and higher replacement noise barriers to Whitley Wood, Sindlesham and Winnersh, to form part of this enhanced mitigation strategy. The results of that assessment, and the results of the assessment of the landscape and visual impact of any additional noise barriers proposed, will be provided to the Examination in due course.
5. *Currently there are no acoustic fences along this part of the motorway. Highways England are planning 4 small sections of Acoustic fencing but this is inadequate in my opinion and in the opinion of many residents. The measures that I am thinking of would be an 3 metre acoustic fence for the length of the motorway on the Lower Earley side between junctions 11 and 10. additional 3 metre acoustic fencing should also be erected around the Black Boy roundabout at Shinfield and in Winnersh. I would estimate that these measures would cost a maximum of £2m. This is based on a cost of the acoustic fence costing £200 a metre and a similar cost for erecting it.*

Highways England Comment

- 5.1 It is not correct that there are no barriers along the M4 between junction 10 and junction 11, as there are existing noise barriers to Whitley Wood, Sindlesham and

Winnersh, which are shown on Sheets 3, 4 and 5 of Drawing 12.2 (Application Document Reference 6-2). There are no existing noise barriers to Shinfield, Earley/Lower Earley or Emmbrook..

- 5.2 Additional noise barriers, which mitigate the effects of the Scheme, are proposed between junction 10 and junction 11 where the M4 motorway crosses over Mill Lane at Sindlesham, as shown on Sheet 5 of Drawing 12.2 (Application Document 6-2).
- 5.3 The representation proposes additional mitigation in the form of the installation of a 3m high acoustic fence for the length of the motorway between junctions 11 and 10 on the Lower Earley side of the motorway. The cost estimate for this acoustic fence provided in the written representation is approximately correct. Highways England is currently considering the possibility of providing enhanced mitigation (in the form of additional noise barriers and the replacement of existing barriers with higher barriers) along this stretch of the M4. Work is ongoing to provide a quantitative assessment of this potential enhanced mitigation strategy, based on a cost benefit analysis for each group of sensitive receptors, rather than the wholesale provision of noise barriers between junctions.
- 5.4 In relation to the proposal in the representation as suggested at the Black Boy Roundabout, Highways England confirms that this infrastructure does not form part of the Scheme and therefore no mitigation comprising additional noise barriers is proposed.
6. *“There are also areas of waste land along the side of Lower Earley Way where earth bunding could be erected. The added advantage of this is it will the astatic look of the area. Residents wont be able to see the M4 and hopefully will hear less of it.”*

Highways England Comment

- 6.1 The section of the Scheme adjacent to Lower Earley Way is for the most part contained by existing intervening vegetation and a noise barrier, as illustrated in the drawings Vegetation Clearance Sheet 6 and the Environmental Masterplan Sheet 6 in Annexes A2 and A1 respectively to the Engineering and Design Report (Application Document Reference 7-4). As a consequence, the residual visual effects of the Scheme on the adjacent residential properties at Whitely Wood are limited to a small number of properties at Old Whitley Wood (Receptor 3.1.3) with upper storey views over the adjacent noise barrier, as shown in the Environmental Statement (“ES”)

Appendix 8.4 (Application Document Reference 6-3) and Figure 8.2 Sheet 3 (Application Document Reference 6-2). These properties will have a partial view to the proposed Gantry G8-22a resulting in, at worst, a slight adverse visual effect. At this location there is no available land between the M4 and Lower Earley Way to provide earth bunding. Elsewhere along Lower Earley Way, no other visual effects have been reported in Chapter 8 of the ES and consequently the provision of a new bund would not be warranted.

6.2 Comments regarding additional noise mitigation proposals have been addressed in the response to paragraph 3 above.

7. *At your meeting in Maidenhead I offered to show you and your team where these fences and earth bunding could go. I stand by this offer. I would ask you to think about spending more time listening to the noise around the M4 between junctions 11 and 10 than is currently planned on your sight visits in November. Currently you are planning to stop at Mill Lane and Shinfield Road.*

8. *I would like you to make several stops between these two points and suggest the following. In Lower Earley; Bythorn Close, Wickham Road, Stowmarket Close, Paddick Drive, Swepstone Close, Moorhen Drive, Fleetham Gardens, Meldreth Way, Chatteris Way, Gregory Close, Rainworth Close, Chatton Close, Maltby Way, Beauchief Close and in Shinfield, Chrysanthemum Drive, Fuchsia Grove, Ducketts Mead and Cirrus Drive. In Lower Earley there are 10,000 houses that are blighted by the motorway. This is a real opportunity to make a change for the better and to make a difference to the lives of over 30,000 people.*

Highways England Comment

8.1 The Examining Authority (“ExA”) has reviewed the representation in relation to locations to be visited as part of the accompanied site visit and published the itinerary on 26 October 2015.

9. *As well as reducing the noise levels. I hope that the noise mitigation measures that I have suggested will also improve the air quality along this part of the M4. Erecting the acoustic fences and earth bunding will hopefully improve air quality. The planting of trees and shrubs on the earth bunding should also lead to further improvements in air quality. I understand that trials are currently being undertaken along parts of the M62 and in other parts of the world to see if this is true.*

Highways England Comment

- 9.1 Comments regarding additional noise mitigation proposals have been addressed in the response to paragraph 3 above.
- 9.2 With regards to improving air quality, the use of barriers and earth bunding are not currently approved techniques for mitigating air quality effects on Highways England road schemes. This is because there is uncertainty over the effectiveness of this type of measure. Therefore, based on both the viability of the measure and that the effect is not quantifiable, it is not an appropriate measure to use and is not proposed as part of the Scheme. However, Highways England is currently investigating the effect of barriers on air quality in a field trial, including on the M62 as noted in the representation, so that the use of barriers and/or earth bunding as a potential future targeted mitigation measure can be considered.
10. *I very much hope that you will find time to visit more parts of Lower Earley than is currently planned for you and that you will seriously consider the erection on acoustic fencing and earth bunding along the whole stretch of motorway from junctions 10-11.*