A57 Link Roads TRO10034 - Deadline 4, 16th February 2022 Written representation from Anthony Rae - unique reference: 20029740

- 1. These representations are mostly those that I could have made orally in the hearing session on 11 February. They concern the following questions asked by the inspector. I also advise that I have seen a draft of the deadline 4 submission prepared by Keith Buchan for CPRE and endorse his analysis.
- Item 8: **Cumulative effects** 'The Department for Transport's consultation letter on the A38 Derby Junctions project raises matters in relation to cumulative effects that are relevant to the Proposed Development. **Q c)** Please could the Applicant provide its assessment of the cumulative effects of Greenhouse Gas emissions from the Proposed Development with other existing and/or approved projects on a local, regional and national level on a consistent geographical scale ... etc
- 2. The question refers to the A38 consultation letter and at the bottom of page 1 of that letter there is a reference and link to the report submitted by Dr Boswell on behalf of the Derby Climate Coalition. Dr Boswell has submitted evidence independently to the A57 Examination, which I therefore don't need to reference, but in relation to the A38 scheme there was also a the legal letter on behalf of Derby Climate Coalition which is not referred to in the DfT consultation letter letter by Lewis Hadler, reference number TR010022-001492 which draws out the significance of that A38 report, including how cumulative effects were dealt with by National Highways within the A38 scheme. Since Dr Boswell's reports for both the A38 and A57 schemes are very extensive I simply wish to draw the legal letter to the ExA's attention because it summarises the emissions arguments and presents the legal issues arising and ask it to review its arguments in connection with the A57 scheme. I've not referred to this A38 documentation in my previous submissions because I've only recently become aware of it. I noted that generally and throughout, it's supporting the same arguments as I've presented.
- 3. Since climate change impacts occur cumulatively over carbon budget periods, or to the Net Zero target year of 2050, or the life of scheme then it's absolutely essential that its cumulative effects either to reduce or increase carbon emissions are had regard to. The legal letter refers at length to National Highways (NH) treatment of cumulative effects between its paragraph 83-119. I'd just like to refer concisely to 2 conclusions it reaches:
- the final one at paragraph 119 is that 'The Applicant has not provided sufficient information on the Scheme's likely significant effects on climate. In particular, the Applicant has not provided any assessment of the Scheme's cumulative GHG emissions impacts or the significance of these. Without this information, neither interested parties nor the SoS can properly consider the likely significant effects of the Scheme. Were the SoS to determine whether to make a DCO on the basis of the information that has so far been provided by the Applicant, there would be a breach of the EIA Regs.'
- And then before that there is paragraph 104 .'In short, nowhere in the Applicant's documentation [that is, for the A38 scheme] has the Applicant actually assessed the cumulative GHG emissions associated with the Scheme. That is a fundamental failing and omission in the Applicant's assessment. As the ExA [that is the A38 one] correctly concluded, the Scheme cannot be viewed in isolation.'
- 4. The connection I'd like to make between these reviews of the A38 scheme and the A57 one is that nowhere in ES chapter 14 are its cumulative effects quantified, discussed expertly at length, or even referred to. It says e.g. 14.7.7 that some cumulative effects will be dealt with in subsection 14.10 but when you get to that point you see that a number of effects are treated including e.g 'Reduced road salting providing benefit for water environment' but not the cumulative impact of climate change emissions. So I'd

submit that the same critique that the Boswell report and the legal letter applies to the treatment of this issue on the A38 scheme should also be applied to the A57 scheme. I ask the ExA to review the comprehensive arguments that the legal letter presents and apply them to this scheme as appropriate.

Significant effects - The Applicant [REP2-021 Q8.3] said that it has complied with DMRB LA 114 for the assessment of significant effects. This states that "the assessment of projects on climate shall only report significant effects where increases in GHG emissions will have a material impact on the ability of Government to meet its carbon reduction targets". The Applicant also said that there are no recognised thresholds for assessing level of significance in EIA. **Qe**) Please could the Applicant comment on whether the NPSNN sets the criteria for what should be considered a significant effect?

5. On this question I merely wish to reiterate that, as can be seen from the text of NPS 5.16-18, it does not provide any quantified guidance as to what should be understood by the ExA as a 'significant effect' or 'material impact'. In which case it should be for the ExA itself, in the context of developing scientific evidence relating to the scale of carbon impacts more widely and therefore decarbonisation required, and of evidence submitted to the examination of a particular scheme, to interpret what it (the ExA) believes to be such effects and impacts.

Chapter 14 of the ES [REP1-019] states that the Proposed Development would release an additional 38,970 tCO2e into the atmosphere during construction, and 401,026 tCO2e over 60 years of operation. **Q h)** In the context of net zero by 2050, please could the Applicant and the local authorities comment on whether, in EIA terms, it appears reasonable for the releases to be considered "not significant"? Is it reasonable for the planning balance? Should requirements for mitigation be on the basis that there are significant effects?

- 6. As mentioned in previous submissions I'm referring solely to operational emissions (so one would also need to allow the effects of construction emissions in the total emissions quantification). ES Table 14.15 compares the operational emissions at the 2025 and 2040 years, and from those appears to calculate a 'total over 60 years' of the net increase between the DM and DS. Unless I've misunderstood the methodology (I can't see it defined elsewhere in this chapter) the latter identifies the 60 year CO2e tonnage as between 46.7 million tonnes for the DM and 47.1Mt for the DS, which in itself is an absolute 'significant' quantity.
- 7. But the main point to make is about the increase in emissions between the 2025 and 2040 year: I take that as being between the 2025 DM of 737,485 tonnes and the 2040 DS of 792,072 tonnes. NH emphasises only the difference between the DM and DS at just 6,893t but in my deadline 2 note I was making a different interpretation. Firstly at paragraph 5 I observed 'The emissions evidence for the A57 scheme is equally clear: '... in both the opening and design years the Scheme will lead to an increase in operational emissions ...' *Environmental Statement (ES) 14.9.7* This increase is caused by the 'increased vehicle kilometres generated by the scheme' *ibid* and then in my paragraph 7 I noted that 'it is therefore common ground that carbon emissions as a result of this scheme will increase'.
- 8. You'd expect that by the time we reach 2040 the progressive implementation of vehicle electrification would have been such that, given a fixed volume of traffic across the scheme, that the emissions tonnage would have reduced substantially compared to the volume in 2025. The consequence of that outcome would be that such an infrastructure investment would have been contributing to, and be aligned with, the overall transport decarbonisation pathway set by the Transport Decarbonisation Plan

(TDP) and government NZ Strategy. But instead what we see is an <u>increase</u> in emissions in 2040 around 7.5% between the 2025 DM and the 2040 DS.

- 9. The submission by Keith Buchan then puts his quantification of the absolute increases in emissions between the DM and DS in the context of the amount of total decarbonisation required by the pathway of the TDP. He concludes that 'Thus the cost of the Do Something in carbon terms should be tested against what the Government considers is essential to meet its climate change obligations'; and then that 'the Do Something presented in this case shows clearly that there will be, after allowing for the electrification of the car fleet up to 2050, insufficient decrease in carbon to meet Government requirements.
- 10. The sort of percentage increase identified in the para.8 above (7.5%) could be typical across a wide range of NH schemes. The ExA may have noted the quantification of that wider impact produced by Transport Action Network: 'We found the figures in National Highways' published environmental reports for schemes where they are available. So far we have the user emissions data from extra traffic for 46 out of the 50 listed schemes, which reveals that National Highways estimates the extra traffic will lead to almost **33 million tonnes of extra carbon emissions.'** *emphasis added*
- 11. The TAN analysis has recently been corroborated in the report *Net Zero Test* Vivid Economics for WWF pages 46-7 www.wwf.org.uk/sites/default/files/2022-02/Net%20Zero_Test_Autumn_Budget_Long%20Report2.pdf. It may be a coincidence but I note that Keith Buchan in the draft of his CPRE submission identifies a similar magnitude of carbon impact: 'In the A57 case there is capital expenditure of about £180million in today's prices. RIS2 is valued at £24.5billion but about £14billion is on capital schemes. If all of them produced as much carbon as the A57, it would amount to over **31million tonnes of CO2e**.' *emphasis added*
- 12. In the context therefore of the absolute increase in annual emissions across the period 2025-40 associated with the A57 scheme; of the significance of cumulative emissions that mentioned earlier; and also that the NPS does not define how the decision maker should interpret 'significant effects' and 'material impacts', I'd like to suggest that in the balancing undertaken by the ExA of this issue that account should be taken of this wider range of other estimates of carbon impacts rather than those solely proposed by NH.

Anthony Rae 16th February 2022