Leicestershire County Council (A511 Growth Corridor) (Side Roads) Order 2023

Leicestershire County Council (A511 Growth Corridor) Compulsory Purchase Order 2023

PINS Ref: NATTRAN/EM/HAO/299

Summary of the Proof of Evidence of Ian Davies

Climate Change

dated 17 May 2024

1 INTRODUCTION

1.1 Qualifications and Experience

1.2 I, Ian Davies, am a Technical Director at AECOM.

1.3 I set out my qualifications in Section 1 of my Evidence. In brief, I am a Member of the Institute of Environmental Management Assessment (MIEMA) and a Chartered Environmentalist (CEnv).

1.4 I have worked for AECOM for 17 years and I have 22 years' experience working in climate change and sustainability.

1.5 This summary proof of evidence (hereinafter referred to as this **Summary**) summarises my Proof of Evidence (my **Evidence**) which is made in support of the Leicestershire County Council (A511 Growth Corridor) (Side Roads) Order 2023 (the **SRO**) and the Leicestershire County Council (A511 Growth Corridor) Compulsory Purchase Order 2023 (the **CPO**) (together, the **Orders**) in connection with the Leicestershire County Council A511 Growth Corridor (also referred to in this Summary and my Evidence as the **Scheme**).

1.6 The facts and matters set out in this Summary are within my own knowledge. The facts set out below are true to the best of my knowledge and belief. Where reference is made to facts which are outside my knowledge, I set out the source of my information and I believe such information to be true.

1.7 I have been assisted by other professional advisors and officers of Leicestershire County Council (the **Council**) with the preparation of my Evidence, some of whom will also provide evidence at the inquiry.

1.8 Involvement with the Scheme

1.9 I have worked on the Scheme since AECOM's involvement in May 2024. AECOM were engaged to consider the impact on the climate due to consequential greenhouse gas emissions over the lifetime of the Scheme. Prior to that matters within my area of expertise were dealt with by WSP as the Council's advisers.

2 Scope of Evidence

2.1 In my Evidence I assess the Scheme on the climate as a result of greenhouse gas emissions relating to the construction and operation of:

2.1.1 the A511 MRN Growth Corridor and the improvements made to the nine locations between the A42 Junction 13 at Ashby to the Field Head roundabout to the east of Junction 22 of the M1;

2.1.2 the nine improvements covered by the Carbon Management Plan (the **CMP**), produced by WSP.

3 Assessment of Scheme Proposals

3.1 Legislation and guidance relevant to the Scheme at the time Planning Permission was granted

3.2 The following relevant legislation is set out at Section 2.2 of my Evidence:

3.2.1 Publicly Available Standard (**PAS**) 2080, 2023 Carbon Management in Buildings and Infrastructure: the best practice guidance framework focusing on managing whole-life carbon in infrastructure. The CMP was prepared in line with the requirements contained in the PAS 2080.

3.2.2 Climate Change Act 2008 (2050 Target Amendment), as amended: sets requirements for reduction in greenhouse gases in the UK and legislated carbon budgets.

3.2.3 National Policy Statement for National Networks, Department for Transport 2024: the Scheme is not large enough to be considered a Nationally Significant Infrastructure Project, but should be considered in the context of this policy. The policy requires the assessment of carbon emissions from qualifying road projects, on the context of national carbon budgets and the impact of a scheme on the UK's ability to meet these.

3.2.4 Transport Decarbonisation Plan, Department of Transport 2021: sets out the government's response to the need for reducing emissions across all modes of transport in line with the UK's net zero targets by 2050.

3.2.5 Net Zero Leicestershire Strategy 2023-2045 (the **Strategy**) and Net Zero Carbon Roadmap (the **Roadmap**): the Strategy sets out the Council's target to achieve net zero by 2045 and a reduction of 78% emissions by 2035 compared to 1990 levels, including road transport. The Roadmap considers achieving net zero targets by, for example, reducing road transport and switching fuel types.

3.3 Assessment methodology

3.4 The purpose of the CMP is to assess the likely impact of carbon emissions over the lifetime of the Scheme and how these will be manged. The CMP presents the following in line with the PAS 2080:

3.4.1 the process for managing carbon through the construction and operation phases of the scheme;

3.4.2 carbon emissions baseline;

3.4.3 carbon reduction targets;

3.4.4 commitments on decarbonisation of the scheme;

3.4.5 opportunities for reducing carbon emissions; and

3.4.6 roles and responsibilities for managing carbon.

3.5 The whole-life carbon emissions were calculated using WSP's Carbon Zero Appraisal Framework, in accordance with the PSA 2080. In summary, the net carbon impact of the Scheme will be a net increase in emissions of 67,826 tCO2e. This equates to 63,600 tCO2e from road user emissions and 4,226 tCO2e from embodied carbon.

3.6 **Construction carbon emissions**

3.7 A detailed breakdown of carbon emissions for each of the nine Projects of the Scheme has been provided in Appendix C of the CMP. This considers embodied carbon, transport to the site, construction activities and embodied carbon associated with maintenance and repair.

3.8 The emission reduction target for embodied carbon is between 20 – 25% measured against the emissions baseline in the CMP.

3.9 **Road user emissions**

3.10 The carbon emissions were calculated over a 60-year period using Defra's Emissions Factor Toolkit for NOx, PM10, M2.5 and CO_2 for a specified year, road type, vehicles speed and fleet composition.

3.11 The Scheme is forecast to reduce traffic congestion on the A511 however the net decrease in congestion may inadvertently result in an overall increase in emissions in the number of journeys increase.

3.12 A carbon reduction target has not been set due to the nature of the user emissions but will ultimately be reduced to net zero in line with government commitment to decarbonise road transportation.

3.13 **Maintenance, repair and refurbishment**

3.14 Emissions from embodied carbon in relation to the maintenance, repair, replacement and refurbishment over the lifetime of the Scheme.

3.15 **Measure to mitigate carbon impacts**

3.16 Mitigation processes are set out in the CMP at Table 6-1 and will be ongoing throughout the duration of the Scheme.

3.17 This includes ongoing measurement and reporting of carbon, engagement with the supply chain, use of local materials, maximising recycling of materials, and use of efficient construction plant.

3.18 **Contextualising the Scheme within the Council and the UK's Net Zero ambitions**

3.19 My Evidence summarises the carbon emissions against the UK's carbon budgets and the Council's Net Zero targets.

3.20 The Scheme contributes a very small amount of carbon to the overall budget, thus does not have a material impact on the UK's ability to meet its carbon reduction targets.

3.21 Construction emissions presented in the CMP are anticipated to decrease as the approach in the CMP is implemented and the Scheme is aligned with the 20-25% carbon reduction target.

3.22 Road user emissions in the CMP have been calculated in line with best practice at the time the CMP was produced but do not fully account for the impact of the Transport Decarbonisation Plan.

4 Conclusion

4.1 My key involvement in the Scheme has been to review the CMP prepared for the Scheme for the purpose of outlining the impacts of the Scheme on the climate resulting from greenhouse gas emissions relating to the construction and operation of the Scheme, in line with the relevant guidance and policy.

4.2 In summary, the Scheme does not have a material impact on the UK's ability to meet its carbon reduction targets. The CMP presents the worst-case scenario for the construction emissions and road user emissions and these metrics will improve in line with the emission targets.