

7.0 Noise and Vibration

7.1 Introduction

7.1.1 This chapter of the Environmental Statement Addendum will identify and describe the nature and significance of the effects likely to arise in relation to noise and vibration as a result of the Proposed Development. This chapter should be read in conjunction with the Noise and Vibration chapter 7 of the 2021 ES, and which remains extant unless superseded by the content of this addendum chapter.

7.1.2 Suono are instructed by Hallam Land to update the noise and vibration assessment, and this chapter is prepared by Tim Fox (previously of RSK Acoustics who prepared the 2021 ES chapter)

7.1.3 This chapter includes an update to the noise and vibration assessment of the 2021 Environmental Statement, accounting for the change in development layout and any changes in noise level from the nearby sources (road and rail specifically).

7.1.4 In response to the originally submitted planning application, Cherwell District Council's Environmental Protection Officer advised on 20 January 2022 'Having read the noise section of the ES I am satisfied with its findings'. It was confirmed that further noise reports would be required at reserved matters stage to cover noise from commercial aspects of the development and that a condition should be attached to any outline permission to secure provision of a Construction Environment Management Plan (CEMP) to ensure constructions works do not adversely affect residential properties.

7.1.5 This chapter should be read in conjunction with the following appendices:

- 7.1 Outline Noise Assessment (replacement to 2021 appendix)
- 7.2 Example Code of Construction Practice
- 7.3 Traffic Assessment

7.2 Assessment Methodology

7.2.1 The assessment methodology reported within the 2021 ES remains up to date.

7.3 Relevant Policy

National Planning Policy Framework

- 7.3.1 There are no material differences within the updated December 2024 NPPF from the July 2021 version, as reported previously within the 2021 ES.

Planning Practice Guidance

- 7.3.2 The PPG on Noise was last updated in July 2019, therefore the policy detailed within the 2021 ES still applies.

Emerging Local Plan

Cherwell Local Plan Review 2042

- 7.3.3 Cherwell District Council (CDC) is preparing a new Local Plan. The consultation (Regulation 19) on the draft of the Cherwell Local Plan Review 2042 was held between 19th December 2024 and 25th February 2025. The Submission Local Plan was approved by CDC Executive on 1 July 2025 and by Full Council on 21 July 2025 and was submitted to the Secretary of State for Housing, Communities and Local Government for independent examination, on 31 July 2025. Officers prepared a Schedule of Proposed Changes and Minor Modifications which they consider would improve and update the draft plan in view of the representations received and updated evidence. These will be submitted for consideration by the Inspector at the examination and if appropriate may form the basis for future Main Modifications to the Submission Local Plan as recommended by the Inspector in order to make the plan sound and/or legally compliant. As such, at this time, only limited weight can be attributed to the emerging Local Plan as a material planning consideration.

7.4 Baseline Conditions

Existing Conditions

7.4.2 A noise survey was previously undertaken in February / March 2021 as part of the 2021 ES. An updated noise survey has been undertaken in October 2024 to review the noise climate across the site.

7.4.2 Measurements were undertaken at similar locations, measuring the same noise sources, with details of both surveys presented in **Appendix 7.1**, with the relevant information reproduced below for ease of reference.

7.4.3 The locations at which both noise surveys have been conducted are set out below:

- MP1 – Free-field position located 1.5 m above local ground level on the southern boundary (towards the eastern side of the boundary) of the site approximately 12 m from the kerb of the A4095. (2021 & 2024)
- MP2 – Free-field position located 4 m above local ground level on the western boundary of the site, approximately 16 m from the raised rail line that runs parallel with the site boundary. (2021 & 2024)
- MP3 – Free-field position located 1.5 m above local ground level approximately 6 m from the kerb of Bicester Road. (2021 only)
- MP3a – Free-field position located 1.5 m above local ground level approximately 5 m from the kerb of Bicester Road. (2024 only)
- MP4 – Free-field position located 2 m above local ground level on the southern boundary (centrally along the boundary) of the site approximately 22 m from the kerb of the A4095. (2024 only)

7.4.4 A Summary of the measured baseline noise levels at the above positions is presented in the following table.

Table 7.4.1: Noise survey results

Location	Survey	Daytime (07:00 – 23:00)	Night-time (23:00 – 07:00)	
		dB $L_{Aeq,16h}$	dB $L_{Aeq,8h}$	dB L_{Amax}
MP1	2021	68	60	77
	2024	65	57	78
MP2	2021	55	50	74
	2024	55	51	74
MP3	2021	61	53	77
MP3a	2024	65	56	80
MP4	2024	61	52	71

7.4.5 Comparatively, noise levels at MP1 and MP4 showed a decrease in noise levels from the A4095 (when corrected for distance) during the 2024 survey. It is noted that road works with traffic light control was taking place on the A4095, near to where MP1 was located. Therefore, the higher recorded levels from the 2021 survey have been used to represent the A4095.

7.4.6 The trainline measurements showed that noise levels remained consistent between the two noise surveys.

7.4.7 When corrected for distance, the noise levels at MP3a during the 2024 survey showed an increase of 2-3 dB in comparison to the levels at MP3 during the 2021 survey. Therefore, the higher recorded levels from the 2024 survey have been used to represent Bicester Road.

Future Baseline or the 'Do Nothing Scenario'

7.4.8 In the absence of the Proposed Development and with all other surrounding developments / committed developments constructed, the baseline noise levels would be expected to increase, albeit not significantly, due to the increase in traffic flow numbers.

7.4.9 Traffic flow data, as provided by Ridge (the Transport Consultant) has been used and updated to define the baseline road traffic scenario and so the likely future noise conditions associated with traffic on surrounding roads has been quantified.

7.5 Potential Effects

Construction stage

- 7.5.1 The potential effects reported within the 2021 ES remain as reported therein and therefore the conclusions remain the same.

Post-completion stage

Noise from Traffic on the Local Road Network

- 7.5.2 **Appendix 7.3** shows the noise levels associated with each scenario alongside the comparison between these and the magnitude of effect.
- 7.5.3 With the updated traffic data, the potential effects reported within the 2021 ES remain as reported therein and therefore the conclusions remain the same.

Suitability of Site for Development

- 7.5.4 Internal and external noise levels have been calculated for indicative proposed dwellings within the parcels on the Development Framework Plan, based on the updated noise measurements as discussed in detail within **Appendix 7.1**.
- 7.5.5 The general conclusions from the 2021 ES remain the same in that it is expected that for the majority of dwellings, it will be possible to achieve internal and external noise criteria without any additional mitigation. The magnitude of the noise effect is found to be Negligible for dwellings located within each parcel.
- 7.5.6 For the outermost dwellings facing each noise source, the levels are calculated to be above the internal noise criteria depending on the proximity of the noise source. The magnitude of the noise effect is found to be significant, unmitigated, for dwellings located on or near the boundary of each parcel.
- 7.5.7 It is proposed that garden spaces relating to houses facing noise sources be located such that the housing themselves will provide acoustic screening so that at least part of the garden area will achieve the external noise criteria.

7.6 Mitigation Measures

Construction stage

- 7.6.1 The mitigation measures detailed within the 2021 ES remain as reported therein, with **Appendix 7.2** providing an example code of construction practice document.

Post-completion stage

Noise from Traffic on the Local Road Network

- 7.6.2 Impacts to all residences are assessed as being either Negligible or Minor Adverse so no means of mitigation are necessary.

Suitability of Site for Development

- 7.6.3 An assessment of the existing noise climate on the proposed new dwellings has been conducted, as detailed in **Appendix 7.1**, having regards to the updated Development Framework Plan. Full details of the mitigation measures required are shown within the appendix.
- 7.6.4 The conclusions remain the same as to what was detailed within the 2021 ES, for which dwellings located closest to the respective noise sources will require mitigation via enhanced acoustic glazing and acoustic ventilators. This will be for the outermost dwellings directly facing the noise sources and is dependent on the final layout which will be developed at the reserved matters stage.

7.7 Residual Effects

- 7.7.1 No change to any of the operational and constructional effects identified in the 2021 application has been identified.

7.8 Cumulative Effects

- 7.8.1 No changes to cumulative effects have been identified and hence no change to the assessment in the 2021 ES is reported.