



# **Norwich Western Link**

## **Environmental Statement**

### **Chapter 7: Noise and Vibration**

#### **Appendix 7.5: Future baseline assessment**

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## 1 Future baseline assessment

1.1.1 This Appendix is only relevant for the operational stage as the future baseline does not need to be considered for the construction stage.

1.1.2 Section 7.4 within **Environmental Statement: Chapter 7 Noise and Vibration** (Document Reference: 3.07.00) describes the two baseline scenarios which are modelled:

- Do-minimum opening year (DM2029); and
- Do-minimum design year (DM2044).

1.1.3 The DM2044 scenario is used to determine the future baseline. This scenario, and a comparison with the DM2029 scenario, is useful in understanding the likely changes in noise level as a result of general traffic growth without the Proposed Scheme.

1.1.4 The noise model has been used to calculate noise levels within the detailed calculation area. Table 1-1 compares the number of dwellings in the DM2029 scenario that are above the LOAEL and SOAEL thresholds with those in the DM2044 scenario.



**Table 1-1 Numbers of dwellings compared to LOAEL and SOAEL**

Noise level	DM202 9 day	DM202 9 night	DM204 4 day	DM204 4 night	Day comparison	Night comparison
Below LOAEL	27	23	26	22	-1	-1
Greater than or equal to LOAEL and less than SOAEL	14	18	15	19	+1	+1
Greater than or equal to SOAEL	3	3	3	3	0	0

1.1.5 Table 1-1 shows that there are minimal changes in terms of the absolute noise level thresholds without the Proposed Scheme in the long-term.

1.1.6 The wedding venue, The Keeper and the Dell (which is discussed within Section 7.5 of the Noise and Vibration Chapter) is predicted to be below the LOAEL during the daytime and night-time scenarios for both the DM2029 and DM2044 scenario. The holiday let at Old Hall Farm is predicted to be above the LOAEL but below the SOAEL during the daytime and night-time scenarios for both the DM2029 and DM2044 scenarios.

1.1.7 In line with the guidance in DMRB LA111, consideration has also been given to the change in noise levels that would arise in the long-term without the Proposed Scheme.

1.1.8 Table 1-2 presents the noise level changes based on a comparison of the DM2029 scenario compared to the DM2044 scenario, sorted into the magnitude of impact bands for long-term noise level changes (Table 7-13 within the Noise and Vibration Chapter).



**Table 1-2 Long-term road traffic noise level changes without the Proposed Scheme**

<b>Long-term noise level change without the Proposed Scheme</b>	<b>Daytime, number of residential receptors</b>	<b>Night-time, number of residential receptors</b>
Negligible increase	44	44
Minor increase	0	0
Moderate increase	0	0
Major increase	0	0
No change	0	0
Negligible decrease	0	0
Minor decrease	0	0
Moderate decrease	0	0
Major decrease	0	0

1.1.9 Table 1-2 shows that all residential receptors are predicted to experience only negligible changes in noise level in the long-term without the Proposed Scheme.

1.1.10 The wedding venue and holiday let are anticipated to experience negligible increases in noise level during both the daytime and night-time.