

A47 North Tuddenham to Easton Dualling

Scheme Number: TR010038

Volume 6

6.3 Environmental Statement Appendices

Appendix 11.1 - Glossary of Terms

APFP Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed
Forms and Procedure) Regulations 2009

March 2021

Infrastructure Planning

Planning Act 2008

**The Infrastructure Planning
(Applications: Prescribed Forms and
Procedure) Regulations 2009**

The A47 North Tuddenham to Easton
Development Consent Order 202[x]

ENVIRONMENTAL STATEMENT APPENDICES
Appendix 11.1 - Glossary of Terms

Regulation Number:	5(2)(a)
Planning Inspectorate Scheme Reference	TR010038
Application Document Reference	TR010038/APP/6.3
BIM Document Reference	HE551489-GTY-ENV-000-RP-LA-30003
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Version	Date	Status of Version
Rev 0	March 2021	Application Issue

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Appendix 11.1

11.1. Glossary of terms

Table 11 1-1: Terms and definitions from DMRB LA111

Term	Definition
Absorptive noise barrier	A noise barrier that has an absorptive lining
Ambient noise	Ambient noise is the total sound in a given situation at a given time usually composed of sound from many sources, near and far.
AAWT	Annual Average Weekday Traffic.
A-weighting	In addition to its non-linear amplitude response, the human ear has a non-linear frequency response; it is less sensitive at low and high frequencies and most sensitive in the mid-range frequencies. NOTE 1: The A-weighting is applied to measured sound pressure levels so that these levels correspond more closely to the subjective response. NOTE 2: A-weighted noise levels are often expressed in dB(A).
Baseline scenario	A description of the state of the environment without implementation of the project.
Basic noise level	The basic noise level (BNL) is a measure of source noise as defined in Appendix A.
Calculation of road traffic noise	The technical memorandum that describes the procedures for calculating noise from road traffic (CRTN).
Construction noise assessment	An assessment which compares predicted noise levels from construction tasks to ambient noise levels at nearby noise sensitive receptors.
Construction vibration assessment	An assessment of magnitude of predicted vibration from construction activities.
Decibel	The unit of measurement used for sound pressure levels and noise levels quoted in decibels (dB). NOTE 1: The decibel scale is logarithmic rather than linear; the threshold of hearing is zero decibels while, at the other extreme, the threshold of pain is about 130 decibels. NOTE 2: These limits are seldom experienced and typical levels lie within the range of 30 dB(A) (a quiet night time level in a bedroom) to 90dB(A) (at the kerbside of a busy road).
Diversion route	A set of approved routes to follow in case of closure of motorway / major A-roads.
Do-minimum	A hypothetical scenario used to provide a realistic comparison of the effects of the scheme. The do-minimum scenario includes changes to the highways infrastructure that would occur even if the scheme does not go ahead, and any other developments in the surrounding area that would influence the movement of traffic and would occur independently of the scheme.
Do-something	A hypothetical scenario used to provide a realistic comparison of the effects of the scheme. The do-something scenario includes changes in traffic flows caused by the scheme as well as any other developments in the surrounding area that would influence the movement of traffic.
Environmental Noise Directive quiet area	A location formally designated as a 2002/49/EC (END) quiet area.

Term	Definition
Facade sound level	Sound level that is determined 1 metre (m) in front of a window or door in a facade.
Free-field sound level	The sound level, which is measured or calculated, in the open, without any reflections from nearby surfaces except the ground.
Future year	The 15th year after opening.
Insertion loss	A measure of the effectiveness of noise control devices such as silencers and enclosures. NOTE: The insertion loss of a device is the difference, in dB, between the noise level with and without the device present.
LA10	The A-weighted sound level, in dB, that is exceeded 10% of the measurement period. NOTE: This is the standard index used within the UK to describe traffic noise.
LA10,18hr	The noise level, in dB, that is exceeded 10% of the time between 0600 and 2400.
LAeq	The equivalent continuous sound level (L_{Aeq}) is the level of a notional steady sound, which at a given position and over a defined period of time, would have the same A-weighted acoustic energy as the fluctuating noise.
LAm _{ax}	The maximum A-weighted level measured during a given time period.
L _{day}	Equivalent continuous sound pressure level where the time interval is the 12 hour period between 07:00 and 19:00.
L _{evening}	Equivalent continuous sound pressure level where the time interval the 4 hour period between 17:00 and 23:00.
L _{night}	A façade noise index derived from the LA10,18hr using the TRL conversion method PR/SE/451/02.
L _{night,outside}	For the purpose of night-time noise assessment, the L _{night,outside} is the equivalent continuous sound level $L_{Aeq,8hr}$ for the period 23:00 to 07:00 hours assessed outside a dwelling and is free-field.
Long-term	Noise change based on the +15 year assessment (for example Do-minimum opening year scenario (DMOY) against Do-minimum future year scenario (DMFY) and DMOY against Do-something future year scenario (DSFY).
Lowest observed adverse effect level (LOAEL)	Level above which adverse effects on health and quality of life can be detected.
NIA	Noise Important Area.
Noise	Unwanted sound.
Noise mapping	The production of computer software generated maps showing how the predicted levels of outdoor noise vary with location.
Noise modelling	Software to predict noise levels. NOTE: This can be undertaken either by specialist software to provide a 3D representation of the project and nearby noise sensitive receptors or a simple spreadsheet.
Noise monitoring	Measurement of noise levels.
Noise sensitive receptor	Receptors which are potentially sensitive to noise.

Term	Definition
	NOTE: Examples include dwellings, hospitals, healthcare facilities, education facilities, community facilities, END quiet areas or potential END quiet areas, international and national or statutorily designated sites, public rights of way and cultural heritage assets.
Non-project noise change	Noise change based on the DMOY against DMFY scenario, with no project implementation.
Opening year	The first year of operation.
Operational noise assessment	An assessment to determine the operational noise impacts and effects of a road project.
Point source attenuation	A source of noise/sound that radiates from a single point, decreasing by 6dB every time the distance between the source and receiver is doubled.
Reflective noise barrier	A noise barrier that reflects noise.
Sensitive buildings	Dwellings, including those that are listed, hospitals, healthcare facilities, education facilities or other buildings where noise or vibration can cause disturbance to people using the buildings.
Short-term	Noise change based on parallel assessment year (for example DMOY against Do-something opening year scenario (DSOY)).
Significant observed adverse effect level (SOAEL)	The level above which significant adverse effects on health and quality of life occur.
Vibration	A to-and-fro motion which oscillates about a fixed equilibrium position.
Vibration sensitive receptor	Receptors which are potentially sensitive to vibration. NOTE: Examples include dwellings, hospitals, healthcare facilities, education facilities, community facilities, buildings containing vibration sensitive equipment and cultural heritage assets.