

## Glossary of Terms

Term	Definition
ADMS Roads	Atmospheric Dispersion Modelling System roads is a line-source Gaussian dispersion model with the capability to model 3 point sources.
Ambient Noise Level	The totally encompassing sound in a given situation at a given time, usually composed of a sound from many sources both distant and near ( $L_{eq,T}$ ).
Amenity	A pleasant or advantageous aspect of the environment.
Aquiclude	A formation so impermeable that it will not transmit enough water for a well or a spring.
Aquifer	A below ground, water-bearing layer of soil or rock.
Archaeology	The study of past societies and individuals through their physical remains.
Architectural lighting	Lighting to enhance the appearance of structures utilising contrast, colours and shadows.
Arisings	Material (often spoil) derived from the ground through excavation
A-weighting, dB(A)	The unit of sound level, weighted according to the A-scale, which takes into account the increased sensitivity of the human ear at some frequencies.
B1 Class Use	Class of land use as set out in the Town and Country Planning (Use classes) Order for business. Includes offices, research and development, light industry appropriate in a residential area.
Baseline Studies	Studies of existing environmental conditions which are designed to establish the baseline conditions against which any future changes can be measured or predicted.
Berm	A mound or bank of earth, used especially as a barrier or to provide insulation.
Biodiversity	The diversity or variety of plants and animals and other living things in a particular area of region. It encompasses landscape diversity, ecosystem diversity, species diversity and genetic diversity.
Borehole	A deep hole bored into the ground as part of intrusive geological investigations.
Bronze Age	A period of occupation spanning the time period between 2200 abd 800 BC
Built Heritage	The study of buildings and their surroundings in their wider cultural, historical and social context.
Bund	A secondary wall surrounding a tank, designed to prevent or contain accidental spillage to the surrounding land.
Carbon Dioxide (CO <sub>2</sub> )	Carbon dioxide is a naturally occurring gas comprising 0.04 per cent of the atmosphere. The burning of fossil fuels releases carbon dioxide fixed by plants many millions of years ago, and this has increased its concentration in the atmosphere by some 12 per cent over the past century. It contributes about 60 per cent of the potential global warming effect of manmade emissions of greenhouse gases.

<b>Term</b>	<b>Definition</b>
Consented Schemes	Developments that have received planning permission and are assumed to be in place by the time the Development being assessed is completed.
Conservation Area Appraisals	Guidance on defining the special architectural or historic interest of Conservation Areas produced by English Heritage in March 1997.
Conservation Area	An area designated by the Local Authority as being of special architectural or historic interest under the provisions of the Planning (Listed Buildings and Conservation Areas 1990) Act, the character or appearance of which it is desirable to preserve or enhance.
Conservation Area Practice	Guidance on the management of Conservation Areas produced by English Heritage in October 1995.
Conservation Area Proposals Statement	A document prepared under Section 71 of the Planning (Listed Buildings and Conservation Areas) Act 1990
Construction Environmental Management Plan	A documented management system with environmental procedures to monitor residual impacts of the construction phase of the development.
Construction Method Statement	A document which addresses the health and safety risks to workers and other personnel on site during the construction phase of a project.
Cumulative Impacts	Impacts that result from incremental changes caused by other past, present or reasonably foreseeable actions.
Decibel	A scale for comparing the ratios of two quantities, including sound pressure and sound power. The difference in level between two sounds $s_1$ and $s_2$ is given by $20 \log_{10} (s_1 / s_2)$ . The decibel can also be used to measure absolute quantities by specifying a reference value that fixes one point on the scale. For sound pressure, the reference value is $20\mu\text{Pa}$ .
Desk-Top Study / Desk-Based Study	A non-intrusive study and review of all available information pertaining to a site, including historical records, collated and monitored data, and consultation with relevant stakeholders.
Dewatering	The removal of water from the ground to make it dry.
Directive	European Union (EU) Directives impose legal obligations on European Member States. They are binding as to the results to be achieved, but allow individual states the right to decide the form and methods used to achieve the results. An example of this is the EU Air Quality Framework Directive (1996) that is brought into legal effect in the UK by the Air Quality (England) Regulations (2000).
Displacement	An estimate of economic factors that may have reasonably been attained by other competitors in the absence of the development.
Embodied Energy	Energy used in the sourcing, manufacture, transportation and assembly of goods and materials.
Emission	A material that is expelled or released to the environment. Usually applied to gaseous or odorous discharges to the atmosphere.
Environmental Assessment	A process by which information about the environmental effects of a project is collected, both by the developer and from other sources, and taken into account by the relevant decision making body before a decision is given on whether the development should go ahead.

<b>Term</b>	<b>Definition</b>
Environmental Impact Assessment	A process by which information about the environmental effects of a project is collected and taken into account by the relevant decision-making body before a decision is given on whether the development should go ahead.
Environmental Statement	A statement that includes such information that is reasonably required to assess the environmental effects of a development.
Evapotranspiration	Combined term for water lost as vapour from a soil or open water surface (evaporation) and water lost from the surface of a plant, mainly via the stomata (transpiration).
F (fast time weighting)	An averaging time used in sound level meters.
Facade	The front or face of a building.
Field Strength	Unit of measurement of all types of radio signals.
Floodplain	Land adjacent to a watercourse over which water flows, or would flow but for defences in place, in times of flood.
Flood Zone 1	Flood Zone 1 comprises land assessed as having a less than 1 in 1000 annual probability of river or sea flooding in any year (<0.1%).
Flood Zone 2	Flood Zone 2 comprises land assessed as having between a 1 in 100 and 1 in 1000 annual probability of river flooding (1% – 0.1%) or between a 1 in 200 and 1 in 1000 annual probability of sea flooding 0.5% – 0.1%) in any year.
Flood Zone 3	Flood Zone 3 comprises land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%) or a 1 in 200 or greater annual probability of flooding from the sea (>0.5%) in any year.
Focal Points	Places of natural co-incidence of accessibility and activity.
Free-Field	Far from the presence of sound reflecting objects (except the ground), usually taken to mean at least 3.5m
Fresnel Zone	The zone or area in which potential for interference exists
Grade I Listed Building	A listed building of exceptional interest.
Grade II Listed Building	A listed building of special interest.
Greenfield Site	Land that has not previously been developed.
Gross External Area	A measure of floor space calculated in accordance with the Royal Institution of Chartered Surveyors (RICS) Code of Measuring Practice.
Groundwater Source Protection Zone	An area in which groundwater is abstracted for public water supply
Heritage Asset	A building, area or scene which makes a positive contribution of special architectural, historic or environmental interest.
Historic Environment Record	This is a county database holding records of known archaeological and historical sites
Historic Landscape	An area where there is evidence of past human activities in the present landscape.
Hydrogeology	The study of geological factors relating to the Earth's water.

<b>Term</b>	<b>Definition</b>
Impact Significance	Opinions from a relevant planning authority at an initial stage as to what are the nature and potential scale of the environmental impacts arising from the proposed development, and assessing what further studies are required to establish their significance.
<i>in situ</i>	Latin - in the natural, original or appropriate position.
Instrument Approach	Operation of aircraft using non-visual aids to guide aircraft towards the airport.
Intrusive investigation	An in-depth investigation involving further sampling and analysis, such as the gathering of samples from the ground, walls, ceilings for the detection of contamination, asbestos and or archaeological remains.
$L_{Aeq,T}$	The A-weighted noise level index called the equivalent continuous noise level over the time period T. This is the level of a notional steady sound that would contain the same amount of sound energy as the actual, possibly fluctuating, sound that was recorded.
$L_{Amax,T}$	The A-weighted noise level index defined as the maximum noise level during the period T. $L_{max}$ is sometimes used for the assessment of occasional loud noises, which may have little effect on the overall $L_{eq}$ noise level but will still affect the noise environment. Unless described otherwise, it is measured using the 'fast' sound level meter response.
$L_{A90,T}$	The A-weighted noise level index. The noise level exceeded for 90% of the time over the period T. $L_{90}$ can be considered to be the "average minimum" noise level and is often used to describe the background noise.
$L_{A10,T}$	The A-weighted noise level index. The noise level exceeded for 10% of the time over the period T. $L_{10}$ can be considered to be the "average maximum" noise level. Generally used to describe road traffic noise.
Landscape Character Area	Area with a distinctive combination of landscape characteristics.
Lawson Criteria	See 'Wind Comfort Criteria'.
Light Pollution	Different forms of unwanted or wasted light as identified by the Institute of Lighting Engineers, including sky glow, glare and light trespass.
Listed Building	A building or structure of special architectural or historic interest. included in the list made by the Secretary of State.
Lux	A measure of light intensity; measured in Ev.
Made Ground	Soils or other material which has been deposited by man rather than natural processes, for example to make up ground levels.
Medieval	Historic time period from AD1066 – AD1485.
Mitigating Factor	A matter to be taken into account as a benefit on balance to offset against any perceived or demonstrable harmful impact.
Mitigation	Any process, activity of thing designed to avoid, reduce or remedy adverse environmental impacts likely to be caused by a development project.
Mitigation Measure	Measure aiming at reducing an adverse environmental effect.

<b>Term</b>	<b>Definition</b>
National Planning Policy Guidance / Statements	National Planning Policy Guidance (PPG)/Statements (PPS) notes set out the Government's policies on different aspects of planning. Local planning authorities must take their content into account in preparing their development plans and the guidance may also be material to decisions on individual planning applications and appeals.
Nitrogen dioxide (NO <sub>2</sub> )	Road transport and the burning of fossil fuels for power are the main sources of Nitrogen dioxide. In addition to being a green house gas it also contributes to photochemical smog formation. It is an irritant to the respiratory system.
Node	A focal point where a number of routes meet.
Non-Aquifer	A below ground layer of soil or rock that does not yield water.
Non-Technical Summary	A summary of the Environmental Statement in 'non-technical language'.
Ordnance Datum	Land levels are measured relative to the average sea level at Newlyn, Cornwall. This average level is referred to as 'Ordnance Datum'.
Particulate Matter	Discrete particles in ambient air, sizes ranging between nanometres (nm, billionths of a metre) to tens of micrometres (µm, millionths of a metre).
Pathways	The routes by which impacts are transmitted through air, water, soils or plants and organisms to their receptors.
Permeability	The extent to which an environment allows people a variety of access routes through it. A permeable environment is one where there is ease of movement and where people have a choice of the routes they may use.
Photomontage	The use of photographs of a site from a certain viewpoint to show both the current base (pre-development) state of the site and the anticipated view of the site once development is complete.
Piezometer	An observation well designed to measure the elevation of the water table or hydraulic head of groundwater at a particular level.
Pile	A timber, steel or concrete post which is driven, jacked or cast (bored) into the ground to carry vertical or horizontal loads.
Plant	A building's generator, heating, ventilation, and/or electricity-production system.
Pollution Pathway	A pollution pathway exists when a source of pollution has been identified which can impact upon a receptor in some way.
Public Realm	The space between and within buildings that are publicly accessible, including streets, squares, forecourts, parks and open spaces.
Rating Noise Level	The specific noise level plus any adjustment for the characteristic features of the noise ( $L_{A,T,r}$ ).

<b>Term</b>	<b>Definition</b>
(Sensitive) Receptor	A component of the natural, created, or built environment such as human being, water, air, a building, or a plant that is affected by an impact.
Residual Impacts	Those impacts of the development that cannot be mitigated following implementation of mitigation proposals.
Residual Noise Level	The ambient noise remaining at a given position in a given situation when specified sources are suppressed to a degree such that they do not contribute to the ambient noise level (LAeq,T)
Resolution to Grant	A resolution by the Local Authority Planning Committee to grant planning permission subject to a Section 106 agreement being signed.
Risk Assessment	An assessment of the likelihood and severity of an occurrence.
Roman	Historic time period from AD43-AD410.
Saxon	Historic time period from AD410-AD1066.
Scheduled Ancient Monument	Site of archaeological or historic interest included in the Schedule of Monuments compiled by the Secretary of State under the Ancient Monuments and Archaeological Areas Act 1979.
Scoping	An initial stage in determining the nature and potential scale of the environmental impacts arising from the proposed development, and assessing what further studies are required to establish their significance.
Scoping Opinion	A written statement of the opinion of the relevant planning authority as to the information to be provided in the Environmental Statement.
Setting	The visible context in which a building or area can be appreciated.
Siltation	Process of the deposition of silt.
Site of Special Scientific Interest	The best sites for wildlife and geological features in England as designated under the Wildlife and Countryside Act 1981.
Special Landscape Area	An area of county-and district- level importance for its landscape character.
Special Protection Area	These sites are classified under the EC Directive on the Conservation of Wild Birds, commonly known as the Birds Directive and are of European Importance for birds.
Specific Noise Level	The equivalent continuous A-weighted sound pressure level at the assessment position produced by the specific noise source (the noise source under investigation) over a given time interval (LAeq,T)
Statutory Consultees	Groups or bodies that, by law, must be consulted as part of the planning application process for EIA development.
Strata (Stratum)	Layer of rock or soil.
Substructure	Elements of the Development below ground level, typically basements and foundations.

<b>Term</b>	<b>Definition</b>
Sustainable Development	Development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.
The Applicant	The person or entity making the planning application.
The Site	The extent of the development site, as defined by the red line boundary plan.
Topography	The natural and man-made features of an area collectively
Transport Assessment	Prepared and submitted alongside planning applications for developments likely to have significant transport implications. For major proposals, assessments should illustrate the following: accessibility to the site by all modes, the likely modal split of journeys to and from the site and proposed measures to improve access by public transport, walking and cycling. Statutory plans produced by each borough which integrate strategic and local planning responsibilities through policies and proposals for the development and use of land in their area.
Trial Pits	Intrusive investigation positions excavated by a mechanical excavator.
Unconformable	(of rock strata) not having the same direction of stratification
Verified Image	A modelled image of the development accurately positioned in three-dimensional space.
Wireline or Wireframe	A modelled representation of the development using outlines only.



## Abbreviations

Term	Description
$\mu\text{gm}^{-3}$	Micrograms per cubic metre
$\mu\text{m}$	Micrometres
AADT	Annual Average Daytime Traffic Flows
AAP	Area Action Plan
AAWT	Annual Average Weekly Traffic Flows
A&AEE	Aeroplane and Armament Experimental Establishment
ADF	Average Daylight Factor
ADMS	Atmospheric Dispersion Modelling System
agl	Above ground level
A&IEU	Armament and Instrumental Experimental Unit
AOD	Above Ordnance Datum
AONB	Area of Outstanding Natural Beauty
APEC	Air Pollution Exposure Criteria
APEG	Airborne particles Expert Group
APSH	Annual Probable Sunlight Hours
AQ	Air Quality
AQMA	Air Quality Management Area
AQR	Air Quality Regulations
AQR00	UK Air Quality Regulations (England) 2000
AQR77	UK Air Quality Regulations 1997
AQS	Air Quality Standards
AST	Above Ground Storage Tank
ATC	Air Traffic Control
AW	Anglian Water
BAME	Black, Asian, Minority People
BAP	Biodiversity Action Plan
BCO	British Council for Offices
bgl	Below Ground Level
BGS	British Geological Survey
BHS	British Hydrological Society
BLEU	Blind Landing Experimental Unit
BMCS	Building Management Control System
BMS	Building Management System
BPEO	Best Practical Environmental Option
BRE	Building Research Establishment
BREEAM	Building Research Establishment Environmental Assessment Methodology
BS	British Standard
BT	British Telecom
BTEX	Benzene, Toluene, Ethylbenzene and Xylenes
<i>c.</i>	Circa (Latin) – approximately or about
$\text{C}_6\text{H}_6$	Benzene
CA	Conservation Area
CAA	Civil Aviation Authority
CABE	Commission for the Architecture and the Built Environment
Calines 4	A dispersion model for predicting air pollutant concentration near roadways
CAZ	Central Area Zone
CCTV	Closed Circuit Television Camera
CECM	Carbon Emissions Calculation Method
CEMP	Construction Environmental Management Plan
CFA	Continuous Flight Auger
CFC	Chlorofluorocarbon

<b>Term</b>	<b>Description</b>
CHP	Central Heat and Power Plant
CIRIA	Construction Industry Research and Information Association
CMS	Construction Method Statement
CO	Carbon monoxide
CO <sub>2</sub>	Carbon dioxide
COCP	Code of Construction Phase
CRoW	The Countryside and Rights of Way Act, 2000
CRTN	Calculation of Road Traffic Noise
CSM	Conceptual Site Model
CTRs	Control Zones
CWS	County Wildlife Centre
dB	Decibel
DCLG	Department fro Communities and Local Government
DEFRA	Department of Environment, Food and Rural Affairs
DETR	Department of Environment, Transport and Regions
DFR	Department for Transport
DfT	Department for Transport
DLR	Docklands Light Railway
DMRB	Design Manual for Roads and Bridges
DO	Dissolved Oxygen
DOE	Department of Environment
DPD	Development Planning Documents
EA	Environment Agency
EC	European Community
ECON	Energy Consumption Guide
EE	Embodied Energy
EEDA	East of England Development Agency
EERA	East of England Regional Assembly
EH	English Heritage
EIA	Environmental Impact Assessment
EOD	Explosive Ordnance Disposal
EOTA	Explosive Ordnance Threat Assessment
EPAQS	Expert Panel on Air Quality Standards
EPH	Extractable Petroleum Hydrocarbons
EQS	Environmental Quality Standards
ES	Environmental Statement
EU	European Union
EUAQDD	European Union Air Quality Daughter Directive
EVDV	Estimated Vibration Dose Value
FEH	Flood Estimation Handbook
FRA	Flood Risk Assessment
GEA	Gross External Area
GEM	Gross External Mean
GFA	Gross Floor Area
GHZ	Gigahertz
GIA	Gross Internal Area
GQA	General Quality Assessment
HA	Highways Agency
Ha	Hectare
HAPs	Habitat Action Plan
HCFC	Hydrochlorofluorocarbon
HER	Hjstoric Environment Record
HF	High Frequency

<b>Term</b>	<b>Description</b>
HGV	Heavy Goods Vehicle
hrs	Hours
HSE	Health and Safety Executive
Hz	Hertz
ICT	Information and Communication Technologies
IEEM	Institute of Ecology and environmental Management
IEMA	Institute of Environmental Management and Assessment
IFA	Institute of Field Archaeologists
ILS	Instrument Landing System
IPC	Integrated Pollution Control
IPPC	Integrated Pollution Prevention Control
IUCN	International Union for the Conservation of Nature
JNCC	Joint Nature Conservation Committee
KgC	Kilograms of Carbon
km	Kilometres
KW	Kilowatts
l/s	Litres per second
LAPPC	Local Authority Pollution Prevention Control
LAQM	Local Air Quality Management
LAQN	Local Air Quality Network
Lb	Pound
LBAP	Local Biodiversity Plan
LC	Local Councils
LDF	Local Development Framework
LF	Low Frequency
LGV	Light Goods Vehicle
LTHW	Low Temperature Hot Water
LTP	Local Transport Plan
LV	Low Voltage
LVIA	Landscape and Visual Impact Assessment
LWC	London Weather Centre
m	Metre
m <sup>2</sup>	Square metre
m <sup>3</sup>	Cubic metre
MasL	Above mean sea level
Mbgkl	Metres below ground level
MF	Medium Frequency
Mgm <sup>3</sup>	Milligrams per cubic metre
mm/s	Millimetres per second
mAOD	Metres Above Ordnance Datum
MPG	Mineral Planning Guidance
ms-1	Metres per second
MSA	Minimum Sector Altitude
MSW	Meteorological Standard Windspeed
MVOC	Minimum Vertical Obstacle Clearance
NAQS	National Air Quality Strategy
N/A	Not Applicable
NEC	Noise Exposure Category
NETCEN	National Environmental Technology Centre
NIA	Net Internal Area
NLA	Net Lettable Area
NM	Nautical Miles
NMVOC	Non-Methane Volatile Organic Carbon

<b>Term</b>	<b>Description</b>
NNR	National Nature Reserve
NO <sub>2</sub>	Nitrogen Dioxide
NO <sub>x</sub>	Nitrogen Oxides
NR	National Railways
NR	Not recorded
NTS	Non-Technical Summary
NVZ	Nitrate Vulnerable Zone
OD	Ordnance Datum
ODPM	Office of the Deputy Prime Minister
OS	Ordnance Survey
Pa	(Pascal) unit of pressure
PAH	Polycyclic Aromatic Hydrocarbon
PCBs	Polychlorinated Biphenols
PM <sub>10</sub>	Particulate Material of a particular size fraction
ppb	Parts per billion
PPE	Personal Protective Equipment
PPG	Planning Policy Guidance Note
ppm	Parts per million
PPS	Planning Policy Statements
PPS25	Planning Policy Statement 25 – Development and Flood Risk
PR	Percentage Runoff
PTAL	Public Transport Accessibility Level
Q	Discharge
RAF	Royal Air Force
ROW	Right of Way
RPG	Regional Planning Guidance
RSPB	Royal Society for the Protection of Birds
RSS	Regional Spatial Strategy
RTN	Road Traffic Noise
SAC	Special Area of Conservation
SAM	Scheduled Ancient Monument
SAPs	Species Action Plans
SBI	Site of Borough Importance
SDG	Sustainable Development Guidelines
SDS	Spatial Development Strategy
SGV	Soil Guidelines Values
SHF	Super High Frequency
SI	Statutory Instrument
SINC	Site of Importance for Nature Conservation
SLA	Special Landscape Area
SO <sub>2</sub>	Sulphur Dioxide
SPA	Special Protection Area
SPG	Supplementary Planning Guidance
SPZ	(Groundwater) Source Protection Zone
SRDF	Sub-Regional Development Framework
SSSI	Site of Special Scientific Interest
SUDS	Sustainable Urban Drainage Systems
SVOC	Semi-Volatile Organic Compounds
TA	Transport Assessment
TCSU	Traffic Control Systems Unit
TEOM	Tapered Element Oscillating Microbalance
TPH	Total Petroleum Hydrocarbons
UCWI	Urban Catchment Wetness Indicator

<b>Term</b>	<b>Description</b>
UHF	Ultra High Frequency
UK	United Kingdom
UKAMN	United Kingdom Air Monitoring Network
UKBAP	United Kingdom Biodiversity Action Plan
UKAS	United Kingdom Accreditation Service
UKDWS	United Kingdom Drinking Water Standards
USA	Updating and Screening Assessment
USAAF	United States Army Airforce
UST	Underground Storage Tank
V	Volume
VDV	Vibration Dose Value
VHF	Very High Frequency
VOC	Volatile Organic Compound
VPH	Volatile Petroleum Hydrocarbon
VVM	Visually Verified Model
WFD	Water Framework Directive
WHO	World Health organisation
WWII	World War Two