

# A428 Black Cat to Caxton Gibbet improvements

TR010044

Volume 6

6.1 Environmental Statement

Chapter 17: Glossary

Planning Act 2008

Regulation 5(2)(a)

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



#### Infrastructure Planning

Planning Act 2008

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

# A428 Black Cat to Caxton Gibbet improvements

Development Consent Order 202[]

#### **Chapter 17: Glossary**

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### Table of contents

| Chap  | pter  | Pages |
|-------|---|-------|
| 17    | Glossary  | 1     |
| 17.1  | Glossary of terms, acronyms and abbreviations         | 1     |
| Table | e of Tables   |       |
| Table | e 17-1: Glossary of Terms. Acronyms and Abbreviations | 1     |



## 17 Glossary

#### 17.1 Glossary of terms, acronyms and abbreviations

17.1.1 **Table 17-1** provides definitions of the technical terms, acronyms and abbreviations used in this Environmental Statement.

Table 17-1: Glossary of terms, acronyms and abbreviations

| Term                  | Acronym or<br>Abbreviation | Definition  |
|-----------------------|----------------------------|---|
| A                     |                            |   |
| Above Ordnance Datum  | AOD                        | Above the mean sea level at Newlyn in Cornwall calculated between 1915 and 1921, taken as a reference point for the height data on Ordnance Survey maps.  |
| Access                |                            | The means by which to approach or enter land, property and assets.  |
| Accommodation works   |                            | Works undertaken to accommodate the needs of landowners affected by a development project, such as the provision of new means of access, fencing and walls.   |
| Additional mitigation |                            | Mitigation measures which are over and above any embedded and standard mitigation measures, and which are required to further reduce the significance of an environmental effect.   |
| Additive effects      |                            | A type of cumulative effect which occurs when similar types of activity have an effect on a single environmental resource or receptor at the same time and in a similar way.  |
| AddressBase data      |                            | An Ordnance Survey data product which enables property information to be linked to addresses on a map.  |
| Affected road network | ARN                        | Parts of the road network which are identified as likely to be affected by changes in air quality as a result of a project. These comprise all roads that trigger the traffic screening criteria and adjoining roads within 200m. |
| Aggregate             |                            | Granular material (for example sand and gravel or crushed rock) that can be used for building and/or civil engineering purposes (for example for concrete production).  |
| Agricultural handback |                            | The returning of earthwork slopes to full agricultural use.   |



| Term                                       | Acronym or Abbreviation | Definition   |
|--|-------------------------|--|
| Agricultural Land<br>Classification        | ALC                     | The system devised and introduced by the Ministry of Agriculture, Fisheries and Food to classify agricultural land according to the extent to which its physical or chemical characteristics impose long-term limitations on agricultural use. Land is graded between 1 (excellent quality) to 5 (very poor quality), with grade 3 subdivided into agricultural subgrades 3a and 3b. |
| Agricultural land holding                  |                         | Land and associated infrastructure for the purpose of agricultural production.   |
| Air quality action plan                    |                         | A plan that must be compiled by a local authority if they declare an air quality management area.  |
| Air Quality Dispersion<br>Modelling System | ADMS                    | An advanced dispersion model used to model the air quality impact of projects.   |
| Air quality exceedance                     |                         | Where pollutant concentrations exceed an air quality standard.   |
| Air quality limit value                    |                         | A maximum pollutant concentration to be achieved in the atmosphere, either without exception or with a permitted number of exceedances. Limit values are defined in European Union Directives and implemented in United Kingdom legislation.   |
| Air Quality Management<br>Area             | AQMA                    | An area declared by a local authority which has been determined will exceed the relevant air quality strategy objective.   |
| Air quality objective                      |                         | Objectives are policy targets generally expressed as a maximum ambient pollutant concentration to be achieved. The objectives are set out in the UK Government's Air Quality Strategy for the key air pollutants.  |
| Air quality threshold                      |                         | Generic term to represent the relevant pollutant averaging period and concentration value described by the air quality strategy objectives or EU limit values.   |
| Alluvial deposits                          |                         | Natural materials deposited within and adjacent to rivers.   |
| Alternatives                               |                         | Different modes, design options and variations considered during project development that have potential to fulfil the project objectives.   |



| Term                              | Acronym or Abbreviation | Definition   |
|-----------------------------------|-------------------------|--|
| 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.   |
| Amenity                           |                         | The benefits of enjoyment and well-being which are gained from a resource in line with its intended function. Amenity may be affected by a combination of factors such as: sound, noise and vibration; dust/air quality; traffic/congestion; and visual impacts.   |
| Ancient woodland                  |                         | Any area that has been continually wooded since at least 1600 AD and have developed irreplaceable, complex ecosystems.   |
| Anno Domini                       | AD                      | The term used to describe a division of time that falls within the Christian era.  |
| Annual Average Daily<br>Traffic   | AADT                    | The total volume of vehicle traffic on a road flowing past a certain point over a year, divided by 365 days.   |
| Annual Average Weekday<br>Traffic | AAWT                    | The average 24-hour traffic volume occurring on weekdays throughout a full year.   |
| Annual Exceedance<br>Probability  | AEP                     | Flood frequency is expressed in terms of an annual exceedance probability, which is the inverse of the annual maximum return period. For example, the 100-year flood (a flood likely to occur once every 100 years) can be expressed as the 1% AEP flood, which has a 1% chance of being exceeded in any year. |
| Anthropogenic                     |                         | Relating to, or resulting from the influence of human beings on nature   |
| APFP Regulations                  |                         | The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009.   |
| Appropriate Assessment            |                         | The assessment of the impact on the integrity of a European site of a project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives.   |
| Arboricultural impact assessment  |                         | An assessment which identifies the effects of a development project on trees.  |
| Aquifer                           |                         | An underground layer of water-bearing permeable rock, rock fractures or unconsolidated materials (gravel, sand or silt).   |



| Term                                  | Acronym or<br>Abbreviation | Definition   |
|---------------------------------------|----------------------------|--|
| Area of Outstanding Natural<br>Beauty | AONB                       | Land protected by the Countryside and Rights of Way Act 2000. It protects the land to conserve and enhance its natural beauty.   |
| Arisings                              |                            | Construction, demolition, excavation and other arisings generated from within a project boundary, during both construction, and operation and maintenance phases.  |
| A-Road                                |                            | A type of road prefixed with the letter 'A'. These are the busiest and most direct main roads, apart from motorways, and can be of different standard.   |
| Arborist                              |                            | An arborist is a professional in the practice of arboriculture, which is the cultivation, management, and study of individual trees, shrubs, vines, and other perennial woody plants in dendrology and horticulture. |
| Assemblage                            |                            | A group of species found in the same location.   |
| At-grade                              |                            | On the same level. For example, when a road is on the current ground level.  |
| Attenuation barrier                   |                            | See noise barrier.   |
| Attenuation basin                     |                            | Part of a drainage system that is used for temporarily storing and attenuating flood waters (can also be referred to as an attenuation pond).  |
| Average Score Per Taxa                | ASPT                       | The BMWP score divided by the number of scoring taxa in the sample. See BMWP.  |
| Avoidance                             |                            | The first stage in the mitigation hierarchy in which measures are assessed in advance of minimisation of impacts, and which are certain.   |
| 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.               |
| В                                     |                            |  |
| Barrow                                |                            | A type of burial mound.  |
| Baseline conditions                   |                            | The environment as it appears (or would appear) immediately prior to the implementation of the project   |



| Term                         | Acronym or Abbreviation | Definition   |
|------------------------------|-------------------------|--|
|                              |                         | together with any known or foreseeable future changes that will take place before completion of the project.   |
| Base year (traffic data)     |                         | The outputs of the traffic model coinciding with the year the traffic data was collected.  |
| Basic Noise Level            | BNL                     | A measure of source noise.   |
| Bedford Borough              |                         | The local authority within whose jurisdiction the proposed scheme would be implemented.  |
| Bedrock                      |                         | Rock that underlies loose deposits such as soil or alluvium.   |
| Below ground level           | BGL                     | Term used to differentiate below ground from above ground.   |
| Berm                         |                         | A flat strip of land, raised bank, or terrace bordering a river or canal.  |
| Best and most versatile land | BMV                     | Land defined as grades 1, 2 and 3a of the Agricultural Land Classification. This land is considered the most flexible, productive and efficient and is most capable of delivering crops for food and non-food uses.                                    |
| Biochemical Oxygen<br>Demand | BOD                     | The amount of dissolved oxygen needed (i.e. demanded) by aerobic biological organisms to break down organic material present in a given water sample at certain temperature over a specific time period.   |
| Biogenetic Reserves          |                         | Biogenetic Reserves aim to conserve European flora, fauna and natural areas especially heathlands and dry grasslands that although common in one country, may be scarce in another.  |
| Biodiversity                 |                         | The variability among living organisms from all sources, including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part of. This includes diversity within species, between species and of ecosystems. |
| Biodiversity Net Gain        | BNG                     | An approach that aims to leave biodiversity within the natural environment in a measurably better state than its condition prior to implementation of a project.   |
| Biodiversity offsetting      |                         | A system used predominantly by planning authorities and developers to fully compensate for biodiversity impacts associated with economic development, through the planning process. In some circumstances, biodiversity                                |



| Term                                   | Acronym or Abbreviation | Definition   |
|--|-------------------------|--|
|  |                         | offsets are designed to result in an overall biodiversity gain.  |
| Biological Monitoring<br>Working Party | BMWP                    | A procedure for measuring water quality using families of macroinvertebrates as biological indicators.   |
| Borehole                               |                         | A hole bored into the ground, usually as part of investigations, typically to test the depth and quality of soil, rock and groundwater. A borehole can also be used to dewater the ground. |
| Borrow Pit                             |                         | An excavated area where material has been dug for use as fill at another location.   |
| Bottleneck                             |                         | A junction or section of road that has lower traffic capacity that the road either side, which causes congestion.  |
| Bridleway                              |                         | A highway over which the public have the following, but no other, rights of way, that is to say, a right of way on foot and a right of way on horseback or leading a horse.                |
| British Geological Survey              | BGS                     | A body which aims to advance geoscientific knowledge of the United Kingdom landmass and its continental shelf by means of systematic surveying, monitoring and research                    |
| British Standard                       | BS                      | Standard produced by the British Standards Institution.  |
| British Standards Institution          |                         | A group which produces British Standards across industry sectors and which is formally designated as the National Standards Body for the UK.   |
| British Telecom                        | вт                      | British multinational telecommunications holding company.  |
| B-road                                 |                         | Numbered distributor roads that have lower traffic densities than trunk roads or A-roads.  |
| Buffer                                 |                         | Specified area or distance surrounding a site or feature of interest.  |
| Built heritage                         |                         | A structure or building of historic value. These structures are visible above ground level.  |



| Term                                    | Acronym or Abbreviation | Definition   |
|---|-------------------------|--|
| Bund                                    |                         | An embankment which acts as a visual or noise screen, or acts as a barrier to control the spillage of fluids.  |
| Buried archaeology (or buried heritage) |                         | An archaeological asset beneath ground level, which may include earthworks.  |
| Businesses                              |                         | Land and buildings for the purpose of commercial/industrial enterprise.  |
| Bypass                                  |                         | The diversion of a major road to carry traffic around a built up area, constructed to improve the journey of through traffic and/or improve the environmental conditions along the original route. |
| Byway                                   |                         | A track, often rural, which is too small to be called a road but which may be open to use by all vehicular traffic or have restrictions on use by non-mechanically propelled vehicles.             |
| С                                       |                         |  |
| Calculation of Road Traffic<br>Noise    | CRTN                    | A technical memorandum that describes the procedures for calculating noise from road traffic.  |
| Camber                                  |                         | The sloped surface of the carriageway, which is designed to allow rainwater to run off easily.   |
| Cambridgeshire County<br>Council        |                         | The county authority within whose jurisdiction part of the Scheme would be implemented.  |
| Canals and Rivers Trust                 |                         | Organisation responsible for canals, rivers, docks and reservoirs in England and Wales.  |
| Carbon budgets                          |                         | UK greenhouse gas targets over defined periods of time.  |
| Carbon emissions                        |                         | Shorthand for emissions of any of the seven greenhouse gases that contribute to climate change.  |
| Carbon footprint                        |                         | The total greenhouse gas emissions associated with a particular policy or development.   |
| Carbon monoxide                         |                         | A pollutant gas generated by combustion sources. At very high concentrations it can be a dangerous asphyxiant.   |



| Term  | Acronym or Abbreviation | Definition  |
|---|-------------------------|---|
| Carriageway   |                         | The width of a highway that can be used by motorised vehicles and non-motorised users, formed by a number of lanes.   |
| Case for the Scheme   |                         | A document prepared to accompany an application for a Development Consent Order.  |
| Catchment   |                         | A drainage/basin area within which precipitation drains into a river system and eventually into the sea.  |
| Catchment abstraction management strategy                         |                         | A process in which the Environment Agency assesses the availability of water resources for each river catchment, produces a strategy and feeds into investigations to identify failing water quality. |
| Celsius   | °C                      | A scale of temperature.   |
| Central Bedfordshire<br>Council                                   |                         | The local authority within whose jurisdiction part of the Scheme would be implemented.  |
| Chainage  |                         | The distance of any point along a road, measured along the road centreline from a chosen origin or start point.   |
| Chartered Environmentalist  |                         | A professional qualification obtained by knowledgeable, experienced, competent and committed environmental professionals.   |
| Chartered Institute of<br>Ecology and Environmental<br>Management | CIEEM                   | The leading professional membership body representing and supporting ecologists and environmental managers in the UK, Ireland and abroad.   |
| Chartered Institution of<br>Water and Environmental<br>Management | CIWEM                   | The leading royal chartered professional body dedicated to sustainable management of the environment, globally.   |
| Chemical Oxygen Demand  | COD                     | An indicative measure of the amount of oxygen that can be consumed by reactions in a measured solution.   |
| Circa   |                         | Meaning approximately, often used in a historic context in reference to a date.   |
| Clay  |                         | An inorganic component of soil derived from the weathering of rock and comprising particles less than 0.002mm in equivalent diameter.   |
| Climate   |                         | Long-term weather conditions prevailing over a region.  |



| Term                                | Acronym or<br>Abbreviation | Definition  |
|-------------------------------------|----------------------------|---|
| Climate change                      |                            | This refers to a change in the state of the climate, which can be identified by changes in average climate characteristics which persist for an extended period, typically decades or longer.   |
| Climate resilience                  |                            | The ability to anticipate, prepare for, and respond to climatic events, trends or disturbances.   |
| Closed-circuit Television           | CCTV                       | A type of video surveillance.   |
| Combined effect                     |                            | A type of cumulative effect which occurs when different types of activity combine to have an effect on a specific receptor or resource.   |
| Committed development               |                            | A development that has full or outline planning permission or is allocated in an adopted development plan.  |
| Community                           |                            | A group of people living in the same place or having a particular characteristic in common.   |
| Community facilities                |                            | Facilities designed for the use and benefit to the local population, for example village greens, village halls, and healthcare and education facilities.  |
| Compañía Logística de Hidrocarburos | CLH                        | A leading international company in the transport and storage of petroleum products in Europe.   |
| Compensation (environmental)        |                            | Offsetting measures applied where nothing can be done to reduce an environmental impact or effect.  |
| Competent Expert(s)                 |                            | The terms used in the EIA Regulations to describe a suitably qualified and experienced person (or persons) responsible for the preparation of the Environmental Statement, either whole or in part.   |
| Compulsory acquisition              |                            | The acquisition of land (or rights over land) without the owner's consent, but in return for compensation.  |
| Conceptual site model               | CSM                        | The conceptual site model is a written and/or illustrative representation of the physical, chemical and biological processes that control the transport, migration and actual/potential impacts of contamination (in soil, air, ground water, surface water and/or sediments) to human and/or ecological receptors. |
| Congestion                          |                            | A situation where the volume of traffic is too great for the road, causing vehicles to slow down or stop, often   |



| Term  | Acronym or Abbreviation | Definition   |
|---|-------------------------|--|
|   |                         | caused by bottlenecks, traffic incidents and junction design.  |
| Connectivity  |                         | A measure of the availability of the habitats needed for a particular species to move through a given area.  |
| Conservation (ecology)                                    |                         | A series of measures required to maintain or restore the natural habitats and the populations of species of wild fauna and flora at a favourable status.   |
| Conservation area   |                         | An area designated under section 69 of the Planning (Listed Buildings and Conservation Areas) Act 1990 as being of special architectural or historic interest and with a character or appearance which is desirable to preserve or enhance.                                  |
| Conservation status                                       |                         | The sum of the influences acting on a natural habitat and its typical species that can affect its long-term natural.   |
| Construction and Demolition Waste                         | CDW                     | Consists of unwanted material produced directly or indirectly as a result of the construction phase.   |
| Construction compound                                     |                         | Construction compounds generally act as the points of entry to the worksites from the public highway. They may also be used for major stockpiling of materials such as topsoil, be used to facilitate transfer of materials, and accommodate offices and welfare facilities. |
| Construction Design and<br>Management Regulations<br>2015 | CDM                     | The Construction (Design and Management) Regulations (CDM 2015) are the main set of regulations for managing the health, safety and welfare of construction projects.  |
| Construction materials                                    |                         | Primary, recycled / secondary and renewable sources of materials required for constructing a project.  |
| Construction noise assessment                             |                         | An assessment which compares predicted noise levels from construction tasks to ambient noise levels at nearby noise sensitive receptors.   |
| Construction plant  |                         | Portable construction machinery and equipment.   |
| Construction Traffic<br>Management Plan                   |                         | A plan which identifies clear controls on routes, vehicle types, vehicle frequency, vehicle quality and hours of site operation.   |
| Construction working area                                 |                         | The construction working areas are where the construction of the Scheme will take place. They can be   |



| Term                              | Acronym or<br>Abbreviation | Definition  |
|-----------------------------------|----------------------------|---|
|                                   |                            | temporary in the case of construction compounds or permanent, in the case of the Scheme.  |
| Construction vibration assessment |                            | An assessment of magnitude of predicted vibration from construction activities.   |
| Consultation Report               |                            | A report which summarises all consultation responses received and explains how the applicant of a Nationally Significant Infrastructure Project has had regard to those responses.  |
| Contractor                        |                            | A general term used to describe an individual or company appointed by a developer to construct or manage a project at a certain price or rate.  |
| Controlled waters                 |                            | Rivers, streams, estuaries, lakes, canals, ditches, ponds and groundwater as far out as the UK territorial limit. The statutory definition is provided in section 104 (1) of the Water Resources Act 1991 and section 30A (d) of the Control of Pollution Act 1974.   |
| County Wildlife Site              | cws                        | A conservation designation in the United Kingdom, which despite conferring no statutory protection onto a site, does affirm a site's importance and value for wildlife in its county context.   |
| Cropmark                          |                            | Cropmarks are a means through which sub-surface archaeological, natural and recent features may be visible from the air or a vantage point on higher ground or a temporary platform.  |
| Cultural heritage                 |                            | Historic monuments, historic groups of buildings and/or historic sites.   |
| Cultural heritage resource        |                            | A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest.  |
| Culvert                           |                            | A tunnel (pipe or box shaped) that carries a stream or open drain under a road or railway.  |
| Cumulative effect (or impact)     |                            | A cumulative impact (or effect) may arise as the result of:  a. the combined impact of a number of different environmental topic-specific impacts from a single environmental impact assessment project on a single receptor/resource; and  b. the combined impact of a number of different projects within the vicinity (in combination with the |



| Term  | Acronym or Abbreviation | Definition   |
|---|-------------------------|--|
|   |                         | environmental impact assessment project) on a single receptor/resource.  |
| Cut-fill balance  |                         | Where the amount of material obtained from earthwork cuttings broadly matches the amount of fill material required to form embankments, thereby minimising the amount of material needed to be imported into, or exported from, a construction site. |
| Cutting (earthwork)                                       |                         | Excavation of earth material to lower the ground level on which a road would be positioned, in order to help to reduce noise and/or visual impact.   |
| Cycleway  |                         | A road, route, or path intended for use by people on bicycles.   |
| D   |                         |  |
| Decibel   | dB                      | The scale used to measure noise is the decibel scale which extends from 0 to 140 decibels, corresponding to the intensity of the sound pressure level.   |
| Decision-maker  |                         | The Secretary of State for Transport (in England).   |
| Decommission  |                         | The act of ceasing operation of an asset to a non-active status.   |
| Definitive Map  |                         | A record of Public Rights of Way in England and Wales, maintained by local authorities.  |
| Delay   |                         | For pedestrians, this is the increase in the 'person-minutes' of the journey times of pedestrians and other non-motorised travellers. For traffic, this is the increase in journey times for drivers and passengers.                                 |
| Department for<br>Communities and Local<br>Government     | DCLG                    | A former government department (now the Ministry of Housing, Communities and Local Government).  |
| Department for<br>Environment, Foods and<br>Rural Affairs | Defra                   | The Government department responsible for policy and regulations on environmental, food and rural issues. The department's priorities are to grow the rural economy, improve the environment and safeguard animal and plant health.                  |
| Department for Transport                                  | DfT                     | The national government body responsible for transport in Britain, and therefore in overall control of the road network. It is mainly responsible for policy decisions, and  |



| Term  | Acronym or Abbreviation | Definition  |
|---|-------------------------|---|
|   |                         | its responsibilities are carried out by a range of agencies and local authorities.  |
| Department for Transport's<br>Transport Analysis<br>Framework | TAG                     | A framework for options appraisal used by Highways England.   |
| Deposition (dust)   |                         | The vertical passage of a substance (for example dust) to a surface or the ground.  |
| Deposition (sediment)   |                         | The laying down of part, or all, of the sediment load of a stream on the bed, banks or floodplain which forms various sediment features such as bars, berms and floodplain deposits.  |
| Designated habitats   |                         | Internationally, nationally and locally designated sites of ecological conservation importance on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity. |
| Design Manual for Roads<br>and Bridges                        | DMRB                    | The Design Manual for Roads and Bridges contains information about current standards relating to the design, assessment and operation of motorway and all-purpose trunk roads in the United Kingdom.                                    |
| Design-development  |                         | The process in which technical specialists (for example engineers and environmentalists) refine the design for the various elements of a development project.   |
| Detailed assessment   |                         | Detailed field surveys and/or quantified modelling techniques to understand complex environmental effects.  |
| Determination   |                         | The formal judgement as to whether a project requires statutory Environmental Impact Assessment or not.   |
| De-trunked  |                         | The transfer of trunk roads from Highways England's responsibility to the local highway authority.  |
| Development Consent<br>Order                                  | DCO                     | The consent for a Nationally Significant Infrastructure Project required under the Planning Act 2008.   |
| Development plan  |                         | Documentation which seeks to guide development and planning in a local authority area for a set period of time.   |
| Development land  |                         | Land identified in national or local plans, policies or strategies for development (including intensification of existing uses) and land subject to planning permission.  |



| Term                    | Acronym or Abbreviation | Definition  |
|-------------------------|-------------------------|---|
| Diffusion tube          |                         | Passive devices used in air quality monitoring to measure weekly or monthly average pollutant concentrations.   |
| Digital Terrain Model   | DTM                     | A digital terrain model is a 3D representation of a terrain's surface.  |
| Directive               |                         | Legal obligations imposed on European member states by the European Union.  |
| Discharge consent       |                         | A consent or permit to discharge effluent that could harm the environment.  |
| Displacement            |                         | Loss of local economic activity as a direct consequence of a proposed development.  |
| Disposal                |                         | Any operation which is not recovery, even where the operation has as a secondary consequence the reclamation of substances or energy.   |
| Dissolved Oxygen        | DO                      | The amount of gaseous oxygen dissolved in water.  |
| Diverge                 |                         | The point where two streams of traffic split and go in different directions.  |
| Diversion route         |                         | A set of approved routes to follow in the case of closure of motorways and/or major A-roads.  |
| Diverted footpath       |                         | An approved route to follow in the case of closure of, or alteration to, a public right of way.   |
| Do Minimum              |                         | The conditions that would persist in the absence of the implementation of a construction or improvement project but on the basis that maintenance on the road network is ongoing. |
| Do Minimum Opening Year | DMOY                    | A scenario reflecting the Do Minimum conditions within the opening year of a road project.  |
| Do Minimum Future Year  | DMFY                    | A scenario reflecting the Do Minimum conditions within a defined future year of a road project.   |
| Do Nothing              |                         | The conditions that would persist in the absence of the implementation of a construction or improvement project.  |
| Do Something            |                         | The conditions that would occur as a consequence the implementation of a construction or improvement project.   |



| Term                                 | Acronym or Abbreviation | Definition  |
|--------------------------------------|-------------------------|---|
| Do Something Opening<br>Year         | DSOY                    | A scenario reflecting the Do Something conditions within the opening year of a road project.  |
| Do Something Future Year             | DSFY                    | A scenario reflecting the Do Something conditions within a defined future year of a road project.   |
| Drift geology                        |                         | Materials of glacial origin including sediments and large rocks derived from erosion, transportation and deposition by glaciers.  |
| Drinking Water Safeguard<br>Zone     |                         | Designated areas in which the use of certain substances must be carefully managed to prevent the pollution of raw water sources that are used to provide drinking water.  |
| Driver stress                        |                         | The adverse mental and physiological effects experienced by a driver traversing a road network. Factors influencing the level of stress include road layout and geometry, surface riding characteristics, junction frequency, and speed and flow. |
| Dumbbell junction                    |                         | A type of grade-separated junction which takes the form of a roundabout either side of a major road.  |
| Dust                                 |                         | All airborne particulate matter.  |
| E                                    |                         |   |
| Early Assessment and<br>Sifting Tool | EAST                    | A Department for Transport tool developed to quickly summarise and present evidence on options in a clear and consistent format, to provide decision-makers with comparative evidence on how they perform.  |
| Earth bund                           |                         | A bund constructed to provide noise or landscape mitigation.  |
| Earthworks                           |                         | The removal or placement of soils and rocks such as in cuttings, embankments and environmental mitigation, including the in-situ improvement of soils/rocks to achieve the desired properties.  |
| East Coast Main Line                 | ECML                    | A 393-mile long major railway between London and Edinburgh via Peterborough, Doncaster, York, Darlington, Durham and Newcastle.   |
| Ecological feature                   |                         | Habitats, species or ecosystems.  |



| Term                             | Acronym or Abbreviation | Definition   |
|----------------------------------|-------------------------|--|
| Ecological Impact<br>Assessment  | EcIA                    | The process of identifying, quantifying and evaluating the potential impacts of defined actions on ecosystems or their components.   |
| Ecological potential             |                         | Surface waters identified as heavily modified water bodies or artificial water bodies must achieve 'good ecological potential' (good potential is a recognition that changes to morphology could make Good Ecological Status very difficult to achieve). |
| Ecological status                |                         | The state of a water body, derived from a number of factors, including: the abundance of aquatic flora and fauna, nutrient availability, salinity, temperature and chemical pollution levels.  |
| Ecosite                          |                         | A non-statutory ecological designated site.  |
| Ecosystem                        |                         | Biological community of interacting organisms (for example plants and animals) and their environment.  |
| Effect                           |                         | Term used to express the consequence of an impact (expressed as the 'significance of effect').   |
| Electric vehicles                |                         | A vehicle which uses one or more electric motors for propulsion.   |
| Elements                         |                         | Parts of environmental factors. For example, listed buildings are part of cultural heritage.   |
| Embankment                       |                         | Artificially raised ground, commonly made of earth material, such as stone, on which the carriageway is laid.  |
| Embedded mitigation              |                         | Design measures which are integrated into a project for the purpose of minimising environmental effects.   |
| Embodied carbon                  |                         | Carbon emissions associated with energy consumption and chemical processes during the extraction, transport and/or manufacture of construction materials or products.  |
| Emission Factor Toolkit          | EFT                     | A tool used to assist local authorities in carrying out a review and assessment of local air quality as part of their duties under the Environmental Act 1995.   |
| Environmental Management<br>Plan | EMP                     | A site specific plan developed to ensure that a project is implemented in an environmentally sustainable manner where all contractors and subcontractors, including consultants, understand the environmental constraints within the site.               |



| Term  | Acronym or Abbreviation | Definition  |
|---|-------------------------|---|
| Enabling works                                  |                         | Enabling works are preparations to make a building site ready for construction. It covers activities from site preparation, creation of access routes, and the installation of facilities like security fencing, ramps, and placing of signs.             |
| Enclosure                                       |                         | Enclosure (sometimes inclosure) was the legal process in England of consolidating (enclosing) small landholdings into larger farms.   |
| Enhancement                                     |                         | A beneficial measure that is over and above what is required to mitigate the adverse effects of a project.  |
| Envirocheck                                     |                         | A provider of environmental data, reports and risk solutions for use in site-based assessments.   |
| Environment Agency                              | EA                      | Government agency established to protect and improve<br>the environment and contribute to sustainable<br>development in England. Responsibilities include: water<br>quality and resources, flooding and coastal risk<br>management and contaminated land. |
| Environment Noise Directive                     | END                     | The Assessment and Management of Noise Directive 2002/49/EC.  |
| Environmental (or<br>Ecological) Clerk of Works | ECoW                    | An individual that supports compliance with legislation and planning conditions or requirements, and also provides advice and guidance throughout construction.   |
| Environmental assessment                        |                         | A process by which information about environmental effects is collected, assessed and used to inform decision-making.   |
| Environmental DNA                               | eDNA                    | DNA that is collected from a range of environmental samples including soil and water, rather than being directly sampled from a plant or animal.  |
| Environmental factors                           |                         | Population and human health; biodiversity; land, soil, water, air and climate; material assets, cultural heritage, and landscape; and the interaction between these factors.  |
| Environmental Health<br>Officer                 | ЕНО                     | A local authority officer with responsibilities for protecting public health through the administration and enforcement of environmental health legislation. Can also be referred to as an Environmental Protection Officer.                              |



| Term   | Acronym or<br>Abbreviation | Definition  |
|--|----------------------------|---|
| Environmental Impact<br>Assessment             | EIA                        | The statutory process through which the likely significant effects of a development project on the environment are identified and assessed.   |
| Environmental Impact<br>Assessment Directive   | EIA Directive              | Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014, amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment.      |
| Environmental Impact<br>Assessment Regulations | EIA<br>Regulations         | The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.   |
| Environmental Management<br>Plan               | EMP                        | A document (or set of documents) that set out the mitigation needed to manage environmental effects associated with a project during its construction and operational phases.                                       |
| Environmental Masterplan                       |                            | Plan which illustrates the mitigation measures integrated into the design of the Scheme.  |
| Environmental Quality<br>Standard              | EQS                        | The maximum permissible concentration of a potentially hazardous chemical.  |
| Environmental Statement                        | ES                         | A statutory document which reports the EIA process, produced in accordance with the EIA Directive as transposed into UK law by the EIA Regulations.   |
| Erosion  |                            | The removal of sediment or bedrock from the bed or banks of a channel by flowing water occurring mostly during high flows and flood events. Forms various river features such as scour holes and steep outer banks. |
| Essential mitigation                           |                            | Mitigation critical for the delivery of a project which can be acquired through statutory powers.   |
| European Commission                            | EC                         | An executive branch of the European Union.  |
| European Economic Area                         | EEA                        | The European Economic Area (EEA) was established via<br>the EEA Agreement, an international agreement which<br>allows for the extension of the EU's single market to non-<br>EU member parties.                     |
| European Protected<br>Species                  | EPS                        | Species of plants and animals (not birds) which are protected by European law.  |



| Term                           | Acronym or Abbreviation | Definition  |
|--------------------------------|-------------------------|---|
| European Site(s)               |                         | <ul> <li>Habitats Directive or Birds Directive sites including:</li> <li>a. Special Protection Areas (SPAs), and potential SPAs (pSPAs);</li> <li>b. Special Areas of Conservation (SACs), and candidate or possible SACs (cSACs or pSACs); and</li> <li>c. Ramsar sites.</li> </ul>              |
| European Union                 | EU                      | An economic and political union of 28 countries which operates an internal (or single) market which allows the free movement of goods, capital, services and people between member states.  |
| Evaluation                     |                         | The determination of the significance of effects. Evaluation involves making judgements as to the value of the receptor/resource that is being affected and the consequences of the effect on the receptor/resource based on the magnitude of the impact.   |
| Examining Authority            | ExA                     | A panel of inspectors appointed by the Secretary of State who are responsible for examining Development Consent Order applications for Nationally Significant Infrastructure Projects.  |
| Excavated material             |                         | Largely natural soil and rock material that is removed from the ground during construction.   |
| Extreme weather                |                         | A weather event which is significantly different from the average or usual weather pattern.   |
| F                              |                         |   |
| Façade noise level             |                         | Sound level that is determined 1 metre (m) in front of a window or door in a façade.  |
| Farm Viability Assessment      |                         | An assessment which establishes the current operational and economic conditions of agricultural businesses and how a project could affect their future viability.   |
| Fauna                          |                         | The animals of a particular region, habitat, or geological period.  |
| Favourable conservation status |                         | For a natural habitat, it occurs when:  a. its natural range and areas it covers within that range are stable or increasing;  b. the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future; and |



| Term   | Acronym or Abbreviation | Definition   |
|--|-------------------------|--|
|  |                         | c. the conservation status of its typical species is favourable.   |
|  |                         | For a species, it occurs when:   |
|  |                         | <ul> <li>a. the population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;</li> <li>b. the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and</li> <li>c. there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.</li> </ul> |
| Features   |                         | Particularly prominent, eye-catching elements or characteristic components such as tree clumps, church towers, or wooded skylines.   |
| Fieldscape                                       |                         | A landscape made up of fields.   |
| Fill   |                         | Material used to artificially raise the existing ground levels.  |
| Find spot  |                         | A term used to describe the location at which an archaeological find was discovered.   |
| First Iteration Environmental<br>Management Plan |                         | The first iteration of the Environmental Management Plan produced during the design stage for the preferred option.  |
| Flood risk                                       |                         | A combination of the probability (likelihood or chance) of<br>a flood event happening, and the consequences (impact)<br>if it occurred.  |
| Flood Risk Assessment                            | FRA                     | The process of assessing potential flood risk to a site and identifying whether there are any flooding or surface water management issues that may warrant further consideration or may affect the feasibility of a project.   |
| Flood Zone 1                                     |                         | Land outside the floodplain where there is little or no risk of flooding.  |
| Flood Zone 2                                     |                         | The area of the floodplain where there is a low to medium flood risk.  |
| Flood Zone 3                                     |                         | The area of the floodplain where there is a high risk of flooding.   |



| Term                       | Acronym or<br>Abbreviation | Definition   |
|----------------------------|----------------------------|--|
| Floodplain                 |                            | Land adjacent to a watercourse over which water flows or would flow in times of flood, but for defences in place.  |
| Fluvial                    |                            | A term that relates to rivers and streams and the processes that occur within them.  |
| Formation (geological)     |                            | A group of related rock strata with some common properties.  |
| Fragmentation (ecological) |                            | The breaking up of a habitat, ecosystem or land use types into smaller parcels.  |
| Free-field sound level     |                            | The sound level which is measured or calculated, in the open, without any reflections from nearby surfaces except the ground.  |
| Free-flow link             |                            | A section of road on a junction that links two roads and enables traffic to move without stopping.   |
| Fugitive Dust              |                            | Visible emissions of dust that does not come from a definable point source, for example a smoke stack.  Typical examples would include stored piles of soil, dry bare earth on construction sites or haul roads etc. |
| Future baseline            |                            | The likely evolution of the current state of the environment without implementation of the project.  |
| Future year                |                            | A year between the opening year and the fifteenth year of operation of a project.  |
| G                          |                            |  |
| Geology                    |                            | The physical structure, substance and history of the earth (rocks and minerals).   |
| Geomorphology              |                            | The structure, origin, and development of the topographical features of the earth's surface.   |
| Geophysical survey         |                            | A process involving ground-based physical sensing techniques to determine the presence or absence of anomalies likely to be caused by archaeological features, structures or deposits.                               |
| Glacial deposit            |                            | Natural materials laid down during the ice ages (Quaternary period).   |



| Term  | Acronym or Abbreviation | Definition   |
|---|-------------------------|--|
| Grade-separated                                 |                         | A type of junction where the major route (or routes) through the junction do not stop and do not cross any other road on the level. Movements to other roads are made using sliproads and bridges. |
| Great Crested Newt                              | GCN                     | A newt in the family Salamandridae, found across Europe and parts of Asia, which are protected under the Conservation of Habitats and Species Regulations 2017.                                    |
| Green Belt                                      |                         | A designation for land around certain cities and large built-up areas, which aims to keep this land permanently open or largely undeveloped.   |
| Greenhouse gases                                | GHG                     | Atmospheric gases that absorb and emit infrared radiation emitted by the Earth's surface, the atmosphere and clouds.   |
| Green Infrastructure<br>Network Area            |                         | An interconnected network of open, greenspaces that provide a range of ecosystem functions.  |
| Ground investigation                            |                         | An intrusive investigation undertaken to collect information relating to the ground conditions, normally for geotechnical or land contamination purposes.  |
| Ground-borne vibration                          |                         | Vibration generated by an event such as the pass-by vehicles in a tunnel, propagated through the ground or structure (i.e. not the air) into a receiving building.                                 |
| Groundwater                                     |                         | Water found underground in porous geological strata and soils.   |
| Groundwater body                                |                         | A distinct volume of groundwater within an aquifer or aquifers   |
| Groundwater Dependent<br>Terrestrial Ecosystems | GWDTE                   | Wetlands which depend on groundwater flows or chemistries.   |
| Groundwater source protection zone              |                         | Areas defined by the Environment Agency which show the risk from contamination/pollution to groundwater that is extracted for drinking water.  |



| Term                               | Acronym or Abbreviation | Definition   |
|------------------------------------|-------------------------|--|
| Н                                  | ·                       |  |
| Habitat                            |                         | The place or type of site where an organism or population naturally occurs. Often used in the wider sense referring to major assemblages of plants and animals found together.                                       |
| Habitat of principal importance    | HPI                     | Habitats in England identified as requiring action in the UK Biodiversity Action Plan and which are regarded as having biodiversity conservation priorities.   |
| Habitats Regulations<br>Assessment | HRA                     | An assessment of projects (or plans) potentially affecting European Sites in the UK, required under the Habitats Directive and Regulations. Also known as an assessment of implications on European Sites.           |
| Habitat Suitability Index          | HSI                     | A numerical index that represents the capacity of a given habitat to support a selected species.   |
| Hard shoulder                      |                         | An auxiliary lane on the left of the carriageway which is set aside for stopped vehicles and emergency services, to ensure the main running lanes remain free from obstruction.                                      |
| Hardcore                           |                         | Material used for infill, for example broken bricks, stone or concrete, which are hard, inert and don't readily deteriorate or absorb water. Often used to raise land levels and serve as a solid base for building. |
| Haul road                          |                         | A temporary road provided within a contractor's site area to allow for the movement of construction material, construction machinery and/or construction labour around the site.                                     |
| Hazardous waste                    |                         | Any waste that displays one or more of the hazardous properties listed in Annex III of the Waste Directive.  |
| Headwaters                         |                         | The source of a river.   |
| Health determinants                |                         | Personal, social, economic and environmental factors which determine the health status of individuals and communities.   |
| Heavy Duty Vehicle                 | HDV                     | See Heavy Goods Vehicle.   |
| Heavy Goods Vehicle                | HGV                     | A commercial carrier vehicle with a gross vehicle weight of more than 3.5 tonnes.  |



| Term  | Acronym or<br>Abbreviation | Definition  |
|---|----------------------------|---|
| Hectare   | ha                         | A metric unit of measurement, equal to 2.471 acres or 10,000 square metres.   |
| Heritage asset                                      |                            | A building, monument, site, place, area or landscape of historic value.   |
| Hertz   | Hz                         | A derived unit of frequency in the International System of Units (SI), which is defined as one cycle per second.  |
| Highways England Water<br>Risk Assessment Tool      | HEWRAT                     | A tool which determines whether the catchments in which they operate are particularly exposed to water risk, as well as to better understand the nature of risk in specific catchments.   |
| Highways England                                    |                            | The government agency responsible for the operation, maintenance and improvement of England's trunk roads and motorways.  |
| Highways England Drainage<br>Data Management System | HADDMS                     | Management system used to store technical information about the location and condition of drainage infrastructure on the network.   |
| Historic  |                            | Associated with past human activity.  |
| Historic England                                    |                            | Executive non-departmental public body created under section 32 of the National Heritage Act 1983 to:   |
|   |                            | <ul> <li>a. secure the preservation of ancient monuments and historic buildings situated in England;</li> <li>b. promote the preservation and enhancement of the character and appearance of conservation areas situated in England; and</li> <li>c. promote the public's enjoyment of, and advance their knowledge of, ancient monuments and historic buildings situated in England and their preservation.</li> </ul> |
| Historic England Good<br>Practice Advice            | GPA                        | Historic England guidance which assists in establishing the significance of heritage assets and their setting.  |
| Historic Environmental<br>Record                    | HER                        | A record of all known archaeological finds and features and historic buildings and historic /landscape features, relating to all periods from the earliest human activity to the present day; maintained by each County and Unitary Authority in the United Kingdom.  |
| Hoarding  |                            | A temporary fence erected around a construction site in order to visually screen and/or contain activities.   |



| Term   | Acronym or Abbreviation | Definition  |
|--|-------------------------|---|
| Hot rolled asphalt                               |                         | A common type of road surfacing comprising a dense mixture of mineral aggregate, sand and bitumen.  |
| Human health                                     |                         | A state of complete physical, mental, and social well-<br>being and not merely the absence of disease or infirmity  |
| Health outcome                                   |                         | The health status of an individual, group or population, attributable to a planned intervention.  |
| Health profile                                   |                         | Statistical picture of the baseline health conditions and trends within an area.  |
| Hydrology  |                         | The scientific study of the movement, distribution, and quality of water on Earth and other planets, including the water cycle, water resources and environmental watershed sustainability.   |
| Hydrogeology                                     |                         | The nature, distribution and movement of groundwater in soils and rocks, including in aquifers.   |
| Hydromorphology                                  |                         | The physical characteristics of the shape, boundaries and content of a water body.  |
| I  | '                       |   |
| Impact   |                         | Change that is caused by an action; for example, land clearing (action) during construction which results in habitat loss (impact).   |
| Imperative reasons of overriding public interest | IROPI                   | Situations where plans or projects are considered indispensable:  a. within the framework of actions or policies aiming to protect fundamental values for citizens' lives (health, safety, environment);  b. within the framework of fundamental policies for the State and society;  c. within the framework of carrying out activities of an economic or social nature, fulfilling specific obligations of public service.  These are plans or projects which are:  a. both necessary and urgent;  b. of such a scale of importance that the reasons outweigh the scale of harm to the integrity of the site; and  c. deliver public good rather than a private interest. |



| Term   | Acronym or Abbreviation | Definition   |
|--|-------------------------|--|
| Important hedgerow   |                         | A hedgerow that is at least 30 years old and which meets certain criteria relating to its particular archaeological, historical, wildlife and landscape value.   |
| Inert waste  |                         | <ul> <li>waste:</li> <li>a. that does not undergo any significant physical, chemical or biological transformations;</li> <li>b. that does not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm to human health; and</li> <li>c. where its total leachability and pollutant content and the ecotoxicity of its leachate are insignificant and, in particular, do not endanger the quality of any surface water or groundwater.</li> </ul> |
| In-situ preservation (cultural heritage)                   |                         | Preserving archaeological remains in their original position.  |
| Institute of Air Quality<br>Management                     | IAQM                    | The professional body for air quality practitioners.   |
| Institute of Environmental<br>Management and<br>Assessment | IEMA                    | A professional body for practitioners working in the fields of environmental management and assessment.  |
| Integrity (ecological)                                     |                         | The coherence of a site's ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it [is or] was classified.   |
| Interchange  |                         | A term used to describe a grade separated junction that provides free flow from one mainline to another.   |
| Interim Advice Note  | IAN                     | Guidance notes issued by Highways England which incorporate amendments or additions to the Design Manual for Roads and Bridges.  |
| Intergovernmental Panel on Climate Change                  | IPCC                    | An intergovernmental body of the United Nations, dedicated to providing the world with an objective, scientific view of climate change, its natural, political and economic impacts and risks, and possible response options.  |



| Term   | Acronym or Abbreviation | Definition   |
|--|-------------------------|--|
| Internal Drainage Board                        | IDB                     | A public body that manage water levels in an area, known as an internal drainage district, where there is a special need for drainage. IDBs undertake works to reduce flood risk to people and property, and manage water levels for agricultural and environmental needs within their district. |
| International Organisation for Standardisation | ISO                     | An independent, non-governmental international organization with a membership of 165 national standards bodies.  |
| International Union for Conservation of Nature | IUCN                    | A membership Union composed of both government and civil society organisations.  |
| Inspectorate                                   |                         | See Planning Inspectorate.   |
| Institute of Acoustics                         | IOA                     | The UK's professional body for those working in acoustics, noise and vibration.  |
| Intervention                                   |                         | Types or groups of highways works, for example online options, designed to meet a series of project objectives.  |
| Invasive species                               |                         | Non-native UK plants that are invasive, for example Japanese Knotweed.   |
| Island   |                         | A raised area designed to deflect or divide traffic, or to make it easier for pedestrians to cross the road.   |
| J  |                         |  |
| Journey length                                 |                         | The physical length of a journey.  |
| Junction                                       |                         | A place where two roads meet, regardless of design or layout.  |
| К  |                         |  |
| Key characteristics (landscape)                |                         | The combination of elements that are particularly important to the current character of the landscape and help to give an area its particularly distinctive sense of place.  |
| Kilometre                                      | km                      | A unit of measurement.   |



| Term                                     | Acronym or Abbreviation | Definition   |
|--|-------------------------|--|
| L  |                         |  |
| L <sub>A10</sub>                         |                         | The A-weighted sound level, in dB, that is exceeded 10% of the measurement period.   |
| LA10,18hr                                |                         | The noise level, in dB, that is exceeded 10% of the time between 0600 and 2400.  |
| L <sub>Aeq</sub>                         |                         | The equivalent continuous sound level (LAeq) is the level of a notional steady sound, which at a given position and over a defined period of time, would have the same Aweighted acoustic energy as the fluctuating noise. |
| L <sub>Amax</sub>                        |                         | The maximum A-weighted level measured during a given time period.  |
| L <sub>night</sub>                       |                         | A facade noise index derived from the LA10,18hr using the TRL conversion method PR/SE/451/02.  |
| Lnight,outside                           |                         | For the purpose of night-time noise assessment, the Lnight, outside is the equivalent continuous sound level LAeq,8hr for the period 23:00 to 07:00 hours assessed outside a dwelling and is free-field.                   |
| Land use                                 |                         | What land is used for, based on broad categories of functional land cover, such as urban and industrial use and the different types of agriculture and forestry.   |
| Landfill capacity                        |                         | The known, forecast or estimated remaining landfill void space, either regionally or nationally.   |
| Landform                                 |                         | The shape and form of the land surface which has resulted from combinations of geology, geomorphology, slope, elevation and physical processes.  |
| Landscape                                |                         | An area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors   |
| Landscape and Ecology<br>Management Plan |                         | A site-specific document(s) containing processes and instructions to manage the planting and landscaping maintenance a site and its operations for the area within the Order Limits.                                       |
| Landscape character                      |                         | A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse.   |



| Term                             | Acronym or Abbreviation | Definition  |
|----------------------------------|-------------------------|---|
| Landscape character area         | LCA                     | Areas of landscape that have a broadly consistent pattern of topography, land use and vegetation cover.   |
| Landscape character assessment   |                         | Process of identifying and describing variation in character of the landscape - the unique combination of elements and features that make landscapes distinctive - to assist in managing change in the landscape.   |
| Landscape character type         |                         | Distinct types of relatively homogeneous landscape, generic in nature but which share broadly similar combinations of geology, topography, drainage patterns, vegetation and historical land use and settlement pattern, and perceptual and aesthetics attributes.  |
| Landscape elements               |                         | Individual parts of the landscape include physical influences (geology, soils, landform, drainage, and water bodies); land cover (different types of vegetation, patterns, and types of tree cover); and human influences (land use and management, character of settlements of buildings, and pattern and type of fields and enclosure). |
| Landscape quality (or condition) |                         | Measure of the physical state of the landscape based on judgements, which can include typical character represented in individual areas, integrity of the landscape, and condition of individual elements.  |
| Landscape receptor               |                         | Defined aspect of the landscape resource that potentially could be affected by the project.   |
| Landscape resource               |                         | Natural and physical attribute, for example soils and vegetation.   |
| Landscape sensitivity            |                         | Applied to specific landscape receptors, combining judgements of the susceptibility of the receptor to the specific type of change proposed and the value related to the receptor.  |
| Landtake                         |                         | The extent of land required temporarily or permanently to construct and operate a project.  |
| Lane                             |                         | A section of carriageway marked out for the use of traffic, and typically intended for use in one direction.  |
| Lay-by                           |                         | A small paved area at the side of the road which allows vehicles to pull off the lane and park.   |
| Laydown area                     |                         | An area used for the temporary storage of construction equipment and supplies.  |



| Term  | Acronym or Abbreviation | Definition   |
|---|-------------------------|--|
| Lead Local Flood Authority                      | LLFA                    | Authority responsible for developing, maintaining and applying a strategy for local flood risk management in their areas and for maintaining a register of flood risk assets.  |
| LiDAR   |                         | An airborne mapping technique which accurately measures the height of the terrain and surface objects on the ground, through the use of a scanning laser that measures the distance between the aircraft and the ground. |
| Light goods vehicle                             |                         | A motor vehicle used to carry goods with a total mass of up to 3.5 tonnes.   |
| Limits of deviation                             | LoD                     | The maximum lateral and vertical extents within which a highway project can be built.  |
| Link  |                         | A section of road between two junctions.   |
| Listed building                                 |                         | A building of special architectural or historic interest.<br>Listed buildings are graded I, II* or II, with Grade I being<br>the highest. Listing includes the interior as well as the<br>exterior of the building.      |
| Lithology                                       |                         | The study of the general physical characteristics of rocks.  |
| Local Air Quality<br>Management                 | LAQM                    | A key part in the UK Government's and the Devolved Administrations' strategies to achieve the air quality objectives.  |
| Local Area Model                                | LAM                     | Traffic model which is used to test the impact of the Scheme on the local road network.  |
| Local authority (also local planning authority) |                         | The body officially responsible for all the public services and facilities in a particular area, and which is empowered by law to exercise planning functions.   |
| Local Biodiversity Action<br>Plan               | LBAP                    | A plan that identifies threatened species and habitats and seeks to protect and restore biological systems.  |
| Local Geological Site                           | LGS                     | Non-statutory geological sites considered worthy of protection for their earth science or landscape importance. Formerly known as Regionally Important Geological Sites.   |



| Term                                      | Acronym or Abbreviation | Definition   |
|---|-------------------------|--|
| Local Nature Reserve                      | LNR                     | A statutory designation made under Section 21 of the National Parks and Access to the Countryside Act 1949 by principal local authorities.   |
| Local Wildlife Site                       | LWS                     | Non-statutory sites of nature conservation value that have been designated 'locally'. These sites are referred to differently between counties with common terms including site of importance for nature conservation, county wildlife site, site of biological importance, site of local importance and sites of metropolitan importance. |
| Long-term (noise)                         |                         | 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 Observable Adverse<br>Effect Level | LOAEL                   | Level above which adverse effects on health and quality of life can be detected.   |
| Low-noise surfacing                       |                         | See thin surface course system.  |
| М   |                         |  |
| Macroinvertebrate                         |                         | Organisms without backbones which are visible to the eye without the aid of a microscope.  |
| Macrophyte                                |                         | A plant (especially a marine plant) large enough to be visible to the naked eye.   |
| Made ground                               |                         | Land where natural and undisturbed soils have largely been replaced by man-made or artificial materials. It may be composed of a variety of materials including imported natural soils and rocks with or without residues of industrial processes (such as ash) or demolition material (such as crushed brick or concrete).                |
| Magnitude                                 |                         | The size of something.   |
| Mainline                                  |                         | The carriageway carrying the main flow of traffic, generally traffic passing straight through a junction or interchange.   |
| Main construction compounds               |                         | Construction compounds that contain features, apparatus and provisions including office and welfare facilities, batching plants, waste management facilities, materials testing laboratory facilities, and CCTV traffic control facilities.  |



| Term                       | Acronym or Abbreviation | Definition  |
|----------------------------|-------------------------|---|
| Main River                 |                         | A river maintained directly by the Environment Agency. They are generally larger arterial watercourses.   |
| Maintenance                |                         | Activities which do not change the nature of the asset.   |
| Marine Conservation Zone   | MCZ                     | Marine Conservation Zones are areas that protect a range of nationally important, rare or threatened habitats and species.  |
| Marine Protection Area     | MPA                     | Marine Protected Areas involve the protective management of natural areas according to predefined management objectives. They can be conserved for a number of reasons including economic resources, biodiversity conservation, and species protection. |
| MasterMap                  |                         | A source of highly-detailed geographic data of Great Britain, provided by Ordnance Survey.  |
| Materials Management Plan  | MMP                     | A mechanism by which those who are developing a site can comply with Environment Agency regulations for excavated ground materials.   |
| Merge                      |                         | The point where two different traffic flows come together and continue as one.  |
| Metapopulation             |                         | A group of spatially separated populations of the same species which interact at some level.  |
| Met Office                 |                         | The United Kingdom's national weather service.  |
| Methane                    |                         | The main constituent of natural gas, and the second most important greenhouse gas.  |
| Metre                      | M                       | A unit of measurement.  |
| Microgram                  | ha                      | One millionth of a gram.  |
| Micron                     | μm                      | One millionth of a metre.   |
| Mineral safeguarding areas |                         | Areas defined by mineral planning authorities with known mineral resources that are of identified economic or conservation value.   |
| Mineral site               |                         | Operational sites or sites identified within strategic planning documents for the extraction of minerals.   |



| Term  | Acronym or Abbreviation | Definition  |
|---|-------------------------|---|
| Mitigation                                  |                         | Measures intended to avoid, reduce and, where possible, remedy significant adverse environmental effects.   |
| Modelling                                   |                         | The process of estimating changes within an area of interest under a specific set of conditions.  |
| Monitoring                                  |                         | An assessment of the performance of the project, including mitigation measures. This determines if effects occur as predicted or if operations remain within acceptable limits, and if mitigation measures are as effective as predicted. |
| Motorway                                    |                         | A special type of road reserved for motorised traffic only, the numbers of which are prefixed with the letter 'M'.  |
| Movement (traffic)                          |                         | A movement is one of the turns or changes in direction that a junction allows.  |
| Multi-Agency Geographic Information Service | MAGIC                   | A website which provides geographic information about the natural environment.  |
| N   |                         |   |
| National Character Area                     |                         | Areas of England defined by their unique combination of landscape, biodiversity, geodiversity, history and cultural an economic activity.   |
| National Cycle Network                      | NCN                     | A national cycling route network of the United Kingdom, which was established to encourage cycling throughout Britain, as well as for the purposes of bicycle touring.  |
| National Heritage List for<br>England       | NHLE                    | A database of designated heritage assets.   |
| National Nature Reserve                     |                         | National Nature Reserves were established to protect some of our most important habitats, species and geology, and to provide 'outdoor laboratories' for research.  |
| National Park                               |                         | A large area of land which is protected by the Government because of its natural beauty, plants or animals, and which the public can usually visit.   |
| National Planning Policy<br>Framework       | NPPF                    | A planning framework which sets out the Government's planning policies for England and how these are expected to be applied.  |



| Term   | Acronym or Abbreviation | Definition   |
|--|-------------------------|--|
| National Policy Statement for England              | NPSE                    | Statements prepared and designated by the Secretary of State under the Planning Act 2008, which establish national policy for Nationally Significant Infrastructure Projects, including energy, transport and water, waste water and waste and against which applications for Development Consent Orders are assessed.   |
| National Policy Statement<br>for National Networks | NPSNN                   | A statement setting out the need for, and the Government's policies to deliver, the development of Nationally Significant Infrastructure Projects on the national road and rail networks in England.   |
| National Pond Survey                               | NPS                     | A Pond Survey method that:   |
|  |                         | <ul> <li>a. Provides a checklist of environmental factors which can be important in describing pond types or explaining biological quality.</li> <li>b. Enables biological and physico-chemical data to be directly compared with the results of other regional and national surveys.</li> <li>c. Enables the biological quality of ponds to be assessed using Pond Action s assessment methods based on the plant and/or animal communities recorded from the pond.</li> <li>d. Provides data for the new National Pond Database collected using compatible methods.</li> </ul> |
| National speed limit                               |                         | The default speed limit which applies to roads without any posted limit, this being 60mph on single carriageway roads and 70mph on dual carriageways and motorways.  |
| National Vegetation<br>Classification              | NVC                     | A comprehensive classification and description of the plant communities of Britain, administered by the Joint Nature Conservation Committee.   |
| Nationally Significant<br>Infrastructure Project   | NSIP                    | A type of project listed in the Planning Act 2008, which must be consented by a Development Consent Order.   |
| Natura 2000  |                         | A network of core breeding and resting sites for rare and threatened species, and some rare natural habitat types which are protected in their own right.  |
| Natural England                                    |                         | Executive non-departmental public body constituted under the Natural Environment and Rural Communities Act 2006 (section 2(1)) to ensure that the natural environment is conserved, enhanced and managed for the benefit of present and future generations, thereby contributing to sustainable development.   |



| Term                                | Acronym or Abbreviation | Definition   |
|-------------------------------------|-------------------------|--|
| Net GHG emissions                   |                         | The difference in greenhouse gas emissions between the do-minimum and do-something scenarios taking into consideration carbon reduction measures (i.e. mitigation measures).   |
| Nitrate vulnerable zone             | NVZ                     | Areas covering 62% of England designated as a result of<br>the EU's Nitrates Directive in order to reduce the level of<br>nitrates in surface and groundwater. Farmers with land in<br>nitrate vulnerable zones have to follow mandatory rules<br>to tackle nitrate loss from agriculture.   |
| Nitrogen dioxide                    | NO2                     | A gas produced when fuels are burned and is often present in motor vehicle and boiler exhaust fumes. It is an irritant to the respiratory system.  |
| Nitrogen oxides                     | NOx                     | A group of chemical compounds consisting only of nitrogen and oxygen which may be interconverted in the atmosphere. The principal oxides of nitrogen are nitric oxide and nitrogen dioxide.  |
| No Observed Adverse<br>Effect Level | NOAEL                   | The no-observed-adverse-effect level denotes the level of exposure of an organism, found by experiment or observation, at which there is no biologically or statistically significant increase in the frequency or severity of any adverse effects (for example alteration of morphology, functional capacity, growth, development or life span) in the exposed population when compared to its appropriate control. |
| Noise                               |                         | Unwanted sound.  |
| Noise barrier                       |                         | Fence placed between a road and a noise sensitive receptor to reduce noise levels. Includes all elements of the fence (posts and fixings, as well as panels).  |
| Noise Important Area                | NIA                     | Areas identified with respect to noise from major roads and from roads within agglomerations where 'the 1% of the population that are affected by the highest noise levels from major roads' are located according to the results of the strategic noise mapping.  |
| Noise Insulation<br>Regulations     | NIR                     | Noise Insulation Regulations 1975 made under Part II of the Land Compensation Act 1973.  |
| Noise mapping                       |                         | The production of computer software generated maps showing how the predicted levels of outdoor noise vary with location.   |



| Term                       | Acronym or Abbreviation | Definition  |
|----------------------------|-------------------------|---|
| Noise monitoring           |                         | The measurement of noise levels.  |
| Noise Sensitive Receptor   |                         | Receptors which are potentially sensitive to noise. These comprise mainly residential buildings, but also include educational buildings, hospitals and places of worship.                                 |
| Non-hazardous waste        |                         | Waste that is neither classified as inert nor hazardous.  |
| Non-statutory consultation |                         | Engagement with members of the public, local groups or stakeholders which is not determined or governed by statutory requirements.  |
| Non-Technical Summary      |                         | Information for the non-specialist reader to enable them to understand the main predicted environmental effects of the proposal without reference to the main Environmental Statement.                    |
| О                          |                         |   |
| Offline                    |                         | Highway development on land under non-highway use, for example a new dual carriageway constructed on agricultural land.   |
| Online                     |                         | Highway development proposed along, or on the line of, an existing road, for example road widening.   |
| Operational                |                         | The functioning of a project on completion of construction.   |
| Operational GHG emissions  |                         | Greenhouse gas emissions associated with the operation and maintenance of the asset, and users of the asset.  |
| Order Limits               |                         | The extent of the area within which the Scheme may be carried out.  |
| Ordinary Watercourse       |                         | Ordinary watercourses include every river, stream, ditch, drain, cut, dyke, sluice, sewer (other than a public sewer) and passage through which water flows and which does not form part of a main river. |
| Ordnance Survey            |                         | The national mapping agency for the UK.   |
| Outfalls                   |                         | The place where a river, drain or sewer empties into the sea, a river, or a lake.   |
| Overbridge                 |                         | A bridge crossing over a transport corridor (for example a highway).  |



| Term                             | Acronym or Abbreviation               | Definition   |
|----------------------------------|---------------------------------------|--|
| Overseeing Organisation          |                                       | The following organisations or their successors:   |
|                                  |                                       | a. Highways England (in England).  |
|                                  |                                       | b. Transport Scotland (in Scotland).   |
|                                  |                                       | c. The Welsh Government (in Wales).  |
|                                  |                                       | d. Department for Infrastructure (in Northern Ireland).  |
| Oxford Clay                      | OXC                                   | Silicate-mudstone, grey, generally smooth to slightly silty, with sporadic beds of argillaceous limestone nodules.   |
| Р                                |                                       |  |
| Parapet                          |                                       | A parapet is a barrier which is an extension of the wall at the edge of a roof, terrace, balcony, walkway or other structure.  |
| Particulate matter               | PM <sub>10</sub> or PM <sub>2.5</sub> | Discrete particles in ambient air, with diameters ranging between nanometres (billionths of a metre) to micrometres (millionths of a metre).   |
| Pathways                         |                                       | The routes by which pollutants are transmitted through air, water, soils, plants and organisms to their receptors.   |
| Peak flood level                 |                                       | The highest stage (largest discharge) reached during a particular flood at a given point on a river.   |
| Penstock                         |                                       | A sluice for controlling or directing the flow of water.   |
| Personal Protective<br>Equipment | PPE                                   | Protective clothing, helmets, goggles, or other garments or equipment designed to protect the wearer's body from injury or infection.  |
| Phase 1 habitat survey           |                                       | A habitat classification and field survey technique to record semi-natural vegetation and other wildlife habitats.   |
| Photomontage                     |                                       | Inserting an image of a project onto a photograph for the purposes of creating an illustrative representation of potential changes to existing views.  |
| Planning Act 2008                | PA 2008                               | An Act of Parliament in the UK intended to speed up the process of approving major new infrastructure projects.  |
| Planning Inspectorate            |                                       | An executive agency with responsibilities for planning appeals, national infrastructure planning applications, local plan examinations and other planning-related casework in England and Wales. |



| Term                                  | Acronym or<br>Abbreviation | Definition  |
|---------------------------------------|----------------------------|---|
| Planning Practice Guidance            | PPG                        | A series of guidance documents which support the content of the National Planning Policy Framework.   |
| Plans and programmes                  |                            | Documents which are:  |
|                                       |                            | e. subject to preparation and/or adoption by an authority at national, regional or local level or which are prepared by an authority for adoption, through a legislative procedure by Parliament or Government; and   |
|                                       |                            | f. required by legislative, regulatory or administrative provisions.  |
| Pollutant concentrations              |                            | Concentrations of pollutants normally reported as micrograms per cubic metre of air (µg/m3).  |
| Pollution Climate Mapping             | PCM                        | A collection of models designed to fulfil part of the UK's EU Directive (2008/50/EC) requirements to report on the concentrations of particular pollutants in the atmosphere.   |
| Pollution prevention guidance         | PPG                        | A series of guidance notes produced by the Environment Agency to advise industry and the public on legal responsibilities and good environmental practice.  |
| Population                            |                            | All individuals located in a particular location (this can be local, regional or at a national scale).  |
| Potential Local Wildlife Site         | pLWS                       | An area being considered against defined nature conservation value criteria. This criteria takes into account the most important, distinctive and threatened species and habitats. If considered suitable pLWS are confirmed as LWS. See Local Wildlife Site. |
| Predictive System for Multimetrics    | PSYM                       | A waterbody quality assessment methodology.   |
| Preferred option                      |                            | The chosen design option that most successfully achieves the project objectives and becomes subject to further design and assessment.   |
| Preferred Route<br>Announcement       | PRA                        | An announcement made by Highways England following the selection of a preferred option or solution for a given road project.  |
| Preliminary Environmental Information | PEI                        | The information referred to in Part 1 of Schedule 4 of the EIA Regulations that has been reasonably compiled by the applicant and is reasonably required to assess the environmental effects of a project.  |



| Term   | Acronym or Abbreviation | Definition  |
|--|-------------------------|---|
| Preliminary Environmental Information Report | PEI Report              | A report that compiles and presents the Preliminary Environmental Information gathered for a project.   |
| Preliminary Sources Study<br>Report          | PSSR                    | A combination of desk study and site reconnaissance, the purpose of which is to develop an initial conceptual site model.   |
| Priority habitats (and species)              |                         | <ul> <li>Species and habitats defined as:</li> <li>a. listed as a national priority for conservation (such as those listed as habitats and species of principal importance for the conservation of biodiversity);</li> <li>b. listed as a local priority for conservation, for example in the relevant local Biodiversity Action Plan;</li> <li>c. Red Listed using International Union for the Conservation of Nature criteria or, where a more recent assessment of the taxonomic group has not yet been undertaken, listed in a Red Data Book;</li> <li>d. listed as Near Threatened or Amber Listed;</li> <li>e. listed as a Nationally Rare or Nationally Scarce species or listed as a Nationally Notable species where a more recent assessment of the taxonomic group has not yet been undertaken; and/or</li> <li>f. endemic to a country or geographic location.</li> </ul> |
| Principal Aquifer                            |                         | Aquifers previously designated as major aquifer   |
| Principal Contractor                         |                         | Contractor appointed to coordinate the construction phase of a project where it involves more than one contractor   |
| Private Means of Access                      | РМА                     | A term used to describe a type of route which is used to connect premises such as homes, businesses and community facilities to the public highway network.   |
| Private property                             |                         | Land, buildings and infrastructure for the purpose of residential use.  |
| Private Water Supply                         |                         | A private water supply which is not provided by a water company.  |
| Programme of investigation                   |                         | Phases of: excavation or other recording; assessment; analysis; and dissemination of results.   |



| Term                      | Acronym or Abbreviation | Definition   |
|---------------------------|-------------------------|--|
| Project                   |                         | Construction works, installations, schemes, or interventions (in the natural surroundings and landscape) including those involving the extraction of mineral resources.  |
| Project Control Framework | PCF                     | A joint Department for Transport and Highways England approach to developing, delivering and managing major road projects.   |
| Protected Road Verge      |                         | Road verge habitats designated to raise awareness about their importance for wildlife to landowners, land managers, utility service providers and planners.  |
| Protected species         |                         | Species of wild plants, birds and animals which are afforded protection through legislative provisions.  |
| Public right of way       | PRoW                    | A highway where the public has the right to pass. It can<br>be a footpath (used for walking), a bridleway (used for<br>walking, riding a horse and cycling), or a byway that is<br>open to all traffic (including motor vehicles).                                       |
| R                         | '                       |  |
| Ramsar                    |                         | Wetlands of international importance designated under the Ramsar Convention.   |
| Reach                     |                         | A stretch of a river used in the assessment of river water quality.  |
| Reasonable alternatives   |                         | Different project design, technology, location, size and scale solutions considered by the developer.  |
| Receptor                  |                         | A defined individual environmental feature usually associated with population, fauna and flora that has potential to be affected by a project.   |
| Recovery (waste)          |                         | Any operation, the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy. |
| Recycling                 |                         | Any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes.   |
| Reference design          |                         | A term used to describe the design information upon which an Environmental Impact Assessment is based.   |



| Term   | Acronym or Abbreviation | Definition  |
|--|-------------------------|---|
| Register of Environmental<br>Actions and Commitments | REAC                    | A register of environmental actions and commitments which is based on mitigation as defined in the Environmental Statement.   |
| Register of Historic<br>Battlefields                 |                         | Historic England's non-statutory register which identifies important English battlefields. Its purpose is to offer them protection and to encourage a greater understanding of their significance.  |
| Register of Historic Parks and Gardens               | RPG                     | Historic England's non-statutory register which identifies over 1,600 sites of historic interest in England assessed to be of national importance. Its purpose is to offer them protection and to encourage a greater understanding of their significance.                          |
| Remediation (contaminated land)                      |                         | The process of removing a pollution linkage (i.e. by removing one or more of the elements in a source-pathway-receptor linkage) in contaminated land in order to render an acceptable risk. Usually this involves a degree of removal of contaminants and/ or blockage of pathways. |
| Representative<br>Concentration Pathway              | RCP                     | A greenhouse gas concentration (not emissions) trajectory adopted by the IPCC for its fifth Assessment Report in 2014   |
| Resilience   |                         | The capacity of a project (or lack thereof) to withstand the adverse effects of climate change.   |
| Resource   |                         | A defined but generally collective environmental feature usually associated with soil, water, air, climatic factors, landscape, material assets, including the architectural and archaeological heritage that has potential to be affected by a project.                            |
| Restoration (ecological)                             |                         | The re-establishment of a damaged or degraded system or habitat to a level similar to its original condition.   |
| Re-use   |                         | Any operation by which products or components that are not waste are used again for the same purpose for which they were conceived.   |
| Ribbon development                                   |                         | The building of houses along a main road, especially one leading out of a town or village.  |
| Riparian   |                         | Relating to or situated on the banks of a river.  |



| Term                               | Acronym or Abbreviation | Definition   |
|------------------------------------|-------------------------|--|
| Risk assessment                    |                         | An assessment of the probability of a hazard occurring that could result in an impact.   |
| River Basin Management<br>Plan     | RBMP                    | A regional plan that sets out how organisations, stakeholders and communities will work together to improve the water environment and fulfil the requirements of the Water Framework Directive.  |
| River Habitat Survey               | RHS                     | A system for assessing the character and habitat quality of rivers based on their physical structure.  |
| River Macrophyte Nutrient<br>Index | RMNI                    | A measure of which plants grow in a river, using a scale from 1 – 10. High scores are associated with species that dominate under enriched conditions.   |
| River Terrace Deposits             | RTD                     | River Terrace Deposits consist of alluvium forming one of<br>a series of level surfaces in a stream or river valley,<br>produced as the dissected remnants of earlier<br>abandoned floodplains. Sand and gravel, locally with<br>lenses of silt, clay or peat.   |
| Road Investment Strategy           | RIS1                    | A document which sets out a long-term vision for England's motorways and major roads, outlining how smooth, smart and sustainable roads will be achieved through investment over a five year period (2015 - 2020).   |
| Road Investment Strategy 2         | RIS2                    | A document which sets a long-term strategic vision for the network. With that vision in mind, it then: specifies the performance standards Highways England must meet; lists planned enhancement schemes we expect to be built; and states the funding that we will make available during the second Road Period (RP2), covering the financial years 2020/21 to 2024/25. |
| Rochdale Envelope                  |                         | An approach to consenting and Environmental Impact Assessment, named after a UK planning law case, which allows the promoters of projects to broadly define their schemes within agreed parameters to retain flexibility of design.  |
| Root Protection Area               | RPA                     | The minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority.  |
| Roundabout                         |                         | A circular, one-way junction at which other roads meet and terminate.  |



| Term                             | Acronym or Abbreviation | Definition  |
|----------------------------------|-------------------------|---|
| Runoff                           |                         | The flow of water over the ground surface.  |
| Routine runoff                   |                         | The normal runoff from roads including any contaminants washed off the surface in rainfall events which can result in either acute or chronic impacts.  |
| Rules of the Route               |                         | Rules agreed with train operators under which speed restrictions or temporary line closures can be imposed for maintenance purposes.  |
| s                                |                         |   |
| Sand                             |                         | Soil particles from 0.06mm-2.0mm in equivalent diameter. Fine sand particles are from 0.06mm-0.2mm; medium sand from 0.2mm-0.6mm; and coarse sand from 0.6mm-2.0mm.   |
| Satellite construction compounds |                         | Construction compounds that would generally be located adjacent to specific works, for example bridge structures, and be in operation for a limited duration.   |
| Scheduled Monument               | SM                      | Nationally significant heritage assets protected by the Ancient Monuments and Archaeological Areas Act 1979.  |
| Scoping                          |                         | The process of identifying the issues to be addressed by the Environmental Impact Assessment process. It is a method of ensuring that an assessment focuses on the important issues and avoids those that are considered to be not significant. |
| Scoping Opinion                  |                         | The written opinion of the relevant authority, following a request from the applicant as to the information to be provided in an Environmental Statement.   |
| Scoping Report                   |                         | A report which records the outcomes of the scoping process and is typically submitted as part of a formal request for a Scoping Opinion.  |
| Screening                        |                         | The formal process undertaken to determine whether it is necessary to carry out a statutory Environmental Impact Assessment and publish an Environmental Statement in accordance with the EIA Regulations.                                      |



| Term   | Acronym or Abbreviation | Definition  |
|--|-------------------------|---|
| Secondary aquifer                                    |                         | There are two types of secondary aquifer designations:  |
|  |                         | <ul> <li>a. Secondary A: permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers; and</li> <li>b. Secondary B: predominantly lower permeability layers which may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers.</li> </ul> |
| Second Iteration<br>Environmental Management<br>Plan |                         | The second iteration of the Environmental Management Plan, which is refined for the construction stage of the consented project and prepared in advance of construction.  |
| Secretary of State for<br>Transport                  |                         | The cabinet minister who (among other things) acts as decision-maker on all national infrastructure applications for development consent.   |
| Sediment   |                         | Organic and inorganic material that has precipitated from water to accumulate on the floor of a water body, watercourse or trap.  |
| Sense of place                                       |                         | The essential character and spirit of an area.  |
| Sensitive receptor                                   |                         | Can include residential properties, gardens, schools, hospitals, care homes, public open spaces, and public access.   |
| Sensitivity  |                         | Term applied to specific receptors, combining judgements of the susceptibility of the receptor to specific type of change proposed and the value related to that receptor.  |
| Sett (badger)  |                         | Any structure or place which displays signs indicating current use by a badger.   |
| Setting (cultural heritage)                          |                         | The surroundings in which a heritage asset is experienced.  |
| Setting (landscape)                                  |                         | Contribution of the surroundings to the appearance of an area or feature and the interrelationship of the area or feature to the wider context and sense of place.  |



| Term   | Acronym or<br>Abbreviation | Definition   |
|--|----------------------------|--|
| Severance (land)                               |                            | The splitting of a land holding into more than one part, for example through the introduction of a new section of road.  |
| Severance (walkers, cyclists and horse riders) |                            | The extent to which members of communities are able (or not able) to move around their community and access services/facilities.   |
| Sewage Treatment Works                         | STW                        | Sewage treatment is the process of removing contaminants from municipal wastewater, containing mainly household sewage plus some industrial wastewater.  |
| Severn Trent Water                             |                            | State-owned water authority responsible for water supply management, and waste water treatment and disposal.   |
| Short-term (noise)                             |                            | Noise change based on parallel assessment year (for example do-minimum opening year against dosomething opening year scenario).  |
| Side road network                              |                            | The network of minor roads which connect to busier or more important road.   |
| Significance (of effect)                       |                            | A measure of the importance or gravity of the environmental effect, defined by generic significance criteria or criteria specific to an environmental topic.   |
| Significant Observed<br>Adverse Effect Level   | SOAEL                      | The level above which significant adverse effects on health and quality of life occur.   |
| Silt   |                            | Soil particles from 0.002mm to less than 0.06mm in equivalent diameter.  |
| Siltation                                      |                            | The process of blocking something with sand or soil.   |
| Simple Assessment                              |                            | The collection and assessment of data and information that is readily available to reach an understanding of the likely environmental effects of a project. This informs the final design or need for further detailed assessment. |
| Site investigation                             |                            | An exploratory site investigation, including field reconnaissance, field and laboratory work, designed to prove the basis of the conceptual site model, as established within the preliminary risk assessment / desk study.        |



| Term  | Acronym or Abbreviation | Definition   |
|---|-------------------------|--|
| Site of Biological<br>Importance              | SBI                     | A non-statutory designation used by some local planning authorities to protect locally valued sites of biological diversity described as local wildlife sites by the UK Government.              |
| Site of Importance for<br>Nature Conservation | SINC                    | Sites designated by local authorities for the purpose of conserving wildlife.  |
| Site of Special Scientific<br>Interest        | SSSI                    | Area of land notified by Natural England under section 28 of the Wildlife and Countryside Act 1981 as being of special interest due to its flora, fauna or geological or physiological features. |
| Site Waste Management<br>Plan                 | SWMP                    | A plan that is used to outline how a construction project would avoid, minimise or mitigate effects on waste production and handling on the environment and surrounding area.                    |
| Site-won                                      |                         | Material derived from a construction site rather than being imported.  |
| Slip road                                     |                         | A connector road within a junction between a mainline carriageway and the local highway network, or vice versa, which meets the local highway network at-grade.                                  |
| Soakaway                                      |                         | A special pit or depression in the land surface that allows water to drain into the ground.  |
| Soil  |                         | An assemblage of mineral particles and/or organic matter which includes variable amounts of water and air (and sometimes other gases).   |
| Soil compaction                               |                         | The removal of pore spaces within soil structures and drainage channels between soil structures. This inhibits root penetration and the movement of air and water in soil.                       |
| Soil erosion                                  |                         | The detachment and movement of soil by the action of water and/or wind.  |
| Soil resource                                 |                         | The textures, structures and volume of different qualities of topsoil and subsoil that have a potential for beneficial reuse.  |



| Term                                     | Acronym or Abbreviation | Definition  |
|--|-------------------------|---|
| Sound power level                        |                         | The sound power level of a source is a measurement of the total acoustic power it radiates. The sound power level is an intrinsic characteristic of a source (analogous to its volume or mass), which is not affected by the environment within which the source is located.  |
| Sound pressure level                     |                         | The parameter by which sound levels are measured in air. It is measured in decibels. The threshold of hearing has been set at 0dB, while the threshold of pain is approximately 120dB. Normal speech is approximately 60dB at a distance of 1 metre and a change of 3dB in a time varying sound signal is commonly regarded as being just detectable. A change of 10dB is subjectively twice, or half, as loud. |
| Source Protection Zone                   | SPZ                     | Zones defined by the Environment Agency to protect groundwater sources such as wells, boreholes and springs from potential contamination.   |
| South Cambridgeshire<br>District Council |                         | The local authority within whose jurisdiction part of the Scheme would be implemented.  |
| Span                                     |                         | The horizontal distance between two supports of a structure (for example piers of a bridge or viaduct).   |
| Spatial scope                            |                         | The geographic area over which environmental impacts and effects could occur as a result of a project.  |
| Special Area of<br>Conservation          | SAC                     | Sites designated under EU legislation for the protection of habitats and species considered to be of European interest.   |
| Species of Principal<br>Importance       | SPI                     | Habitats and species of principal importance in England. Section 41 of the Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England.   |
| Speed band                               |                         | A range of categories for which outputs from the traffic model are grouped into to describe their emissions.  |
| Speed pivoting                           |                         | An adjustment made, where required, to modelled traffic speeds on individual road links to better reflect observed speeds.  |



| Term                                   | Acronym or<br>Abbreviation | Definition  |
|--|----------------------------|---|
| Stable Non-Reactive<br>Hazardous Waste | SNRHW                      | A type of waste that can potentially include a range of monolithic solid waste (these being wastes in large blocky form) or granular solid wastes produced by treatment plants.   |
| Stakeholder                            |                            | An organisation or individual with a particular interest in a project.  |
| Standard mitigation                    |                            | Measures comprising standard techniques and activities which are implemented during the construction of a project to protect the environment and/or mitigate adverse effects, for example the covering of exposed materials to reduce dust emissions. |
| Statement of Community<br>Consultation | SoCC                       | A document detailing how an applicant of a Nationally Significant Infrastructure Project intends to undertake consultation on its proposals.  |
| Statutory consultation                 |                            | Engagement with stakeholders determined or governed by statutory requirements.  |
| Statutory consultee                    |                            | Organisations and bodies, defined by statute, which must be consulted on relevant planning matters.   |
| Statutory undertaker                   |                            | Companies and agencies with legal rights to carry out certain types of development and/or highways works.   |
| Strategic housing site                 |                            | Large scale sites/land allocated in local planning policy for the provision of residential land use.  |
| Strategic employment site              |                            | Large scale sites/land allocated in local planning policy for the provision of employment land use.   |
| Strategic road network                 |                            | The network of motorways and trunk roads in England.  |
| Sterilise                              |                            | Substantially constrain / prevent existing and potential future use and extraction of materials.  |
| Study area                             |                            | The spatial area within which environmental effects are assessed (i.e. extending a distance from the project footprint in which significant environmental effects are anticipated to occur).  |



| Term                                  | Acronym or<br>Abbreviation | Definition  |
|---------------------------------------|----------------------------|---|
| Subsoil                               |                            | Weathered soil layer extending between the natural topsoil and the unweathered basal layer (geological parent material) below, or similar material on which topsoil can be spread. Subsoil has lower organic matter and plant nutrient content than topsoil. In most cases topsoil requires a subsoil to perform one or a number of natural soil functions. |
| Sustainable drainage system           | SuDS                       | Techniques for managing water runoff to reduce the quantity, and increase the quality, of surface water that drains from a development.   |
| SuDS Approval Body                    | SAB                        | A SuDS Approving Body is a body established in unitary or county authorities to approve and, where appropriate, adopt SuDS.   |
| Sulphur dioxide                       |                            | A gas primarily arising from anthropogenic activities and more specifically combustion of fuels containing sulphur and sulphur compounds. Sulphur dioxide is emitted in negligible quantities during the combustion of natural gas but generally at higher concentrations for liquid fuels which have a higher sulphur content.                             |
| Superficial deposit                   |                            | A geological deposit that was laid down during the Quaternary period. Such deposits were largely formed by river, marine or glacial processes but can also include wind-blown deposits known as loess.  |
| Surface water (or surface water body) |                            | Waters including rivers, lakes, loughs, reservoirs, canals, streams, ditches, coastal waters and estuaries.   |
| Susceptibility (landscape)            |                            | Ability of a defined landscape or visual receptor to accommodate the specific proposed change without negative consequences.  |
| Sustainable development               |                            | Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.   |
| Sustainable drainage systems          | SuDS                       | Measures designed to control surface runoff close to its source, including management practices and control measures such as storage tanks, basins, swales, ponds and lakes. Sustainable drainage systems allow a gradual release of water and thereby reduce the potential for downstream flooding.  |



| Term  | Acronym or<br>Abbreviation | Definition  |
|---|----------------------------|---|
| Sustrans  |                            | A UK charity which aims to make it easier for people to walk and cycle, and which promotes the National Cycle Network.  |
| Swale   |                            | A low or hollow place, especially a marshy depression between ridges.   |
| Т   |                            |   |
| Temporal scope                                      |                            | The duration of time over which environmental impacts and effects could occur as a result of a project.   |
| The Scheme  |                            | The A428 Black Cat to Caxton Gibbet improvements.   |
| Thin surface course system                          |                            | A generic term used to describe a type of road surfacing which has a high stone content, laid at a thickness of less than 50mm. It is applied to reduce the noise resulting from the interaction of vehicle tyres with the road. Also known as low-noise surfacing. |
| Third Iteration<br>Environmental Management<br>Plan |                            | The third iteration of the Environmental Management Plan is refined at the end of the construction stage to support future management and operation of the consented project.   |
| Till  |                            | Unsorted glacial sediment deposited directly by a glacier.  |
| T-junction  |                            | A simple three-way junction, where one road ends on another.  |
| Tonnes of carbon dioxide equivalent                 | tCO <sub>2</sub> e         | A measure that allows the different greenhouse gases to be compared on a like-for-like basis relative to one unit of CO2.   |
| Topsoil   |                            | Natural topsoil or manufactured topsoil, usually covering the top 25cm in which plants can grow healthily.  |
| Total suspended solids                              |                            | The dry-weight of suspended particles, that are not dissolved, in a sample of water that can be trapped by a filter that is analysed using a filtration apparatus.  |
| Townscape   |                            | The landscape within the built-up area, including the buildings, urban open spaces, including green spaces and the relationship between buildings and between buildings and open spaces.  |



| Term                                | Acronym or Abbreviation | Definition  |
|-------------------------------------|-------------------------|---|
| Trackout                            |                         | The transportation of dust and dirt from construction sites onto the road network.  |
| Transboundary effects               |                         | The term used to describe the significant environmental effects of a project which extend beyond the boundary of the European Economic Area State within which it would be implemented.   |
| Transect Survey                     |                         | A path along which one counts and records occurrences of the species of study (for example plants).   |
| Translocation                       |                         | The transporting and release of species or habitats from one location to another. For example, if an area of land is required permanently for a new development, species can be moved from that site to a suitable alternative location.  |
| Transport Analysis<br>Guidance      | TAG                     | Guidance produced by the Department for Transport for undertaking transportation studies, appraisals and modelling. Also referred to as WebTAG.   |
| Transport Research<br>Laboratory    | TRL                     | An independent company which offers consultancy and research advice on transportation to the public and private sector.   |
| Tree Preservation Order             | TPO                     | An order made by a local planning authority, under the Town and Country Planning Act 1990, in respect of trees or woodlands. The principal effect of a tree preservation order is to prohibit the cutting down, uprooting, topping, lopping, willful damage or willful destruction of trees without the local planning authority's consent. |
| Trial trenching (cultural heritage) |                         | A method of on-site archaeological investigation where trenches are dug at intervals across a site to identify any archaeological remains.  |
| Trophic Diatom Index                | TDI                     | The trophic diatom index is a new index developed in response to the monitoring needs of the Urban Wastewater Treatment Directive.  |
| Trunk road                          |                         | A road operated and maintained in England by Highways England.  |



| Term                                 | Acronym or<br>Abbreviation | Definition   |
|--------------------------------------|----------------------------|--|
| Two-way trips                        |                            | A person trip is a one-way journey by one person by any mode of transport, including walking, cycling, privately operated motor vehicles, or any public transport modes. A vehicle trip is a one-way journey by a single privately-operated motor vehicle regardless of the number of persons in the vehicle. Two-way trips refer to the total number of vehicle movements in both directions (i.e. with 200 westbound vehicles and 100 eastbound, there would be 300 two-way trips) |
| U                                    |                            |  |
| UK Biodiversity Action Plan          | UKBAP                      | The UK Government's response to the Convention on Biological Diversity.  |
| UK Climate Projections               | UKCP                       | The name given to the UK Climate Projections.  |
| Unacceptable Adverse<br>Effect Level | UAEL                       | Extensive and regular changes in behaviour and/or an inability to mitigate effect of noise leading to psychological stress or physiological effects, for example regular sleep deprivation/awakening; loss of appetite, significant, medically definable harm, including auditory and non-auditory.  |
| Unclassified (road)                  |                            | A road which has no number.  |
| Underbridge (or underpass)           |                            | A bridge crossing under a transport corridor (for example a highway).  |
| Unexploded ordnance                  | UXO                        | Explosives that did not explode when deployed and thus still pose a risk of detonation.  |
| Unitary Development Plan             |                            | A statutory document that sets out the council's planning policies for development, conservation, regeneration and environmental improvement activity.   |
| Unproductive strata                  |                            | Layers of rock or superficial deposits with low permeability or porosity that have a negligible significance for water supply.   |
| Upgrade                              |                            | Refers to the physical improvement of a road, through widening of the carriageway or rebuilding a junction.  |



| Term                          | Acronym or Abbreviation | Definition   |
|-------------------------------|-------------------------|--|
| Utilities                     |                         | The term utilities refers to the set of services provided by these organisations consumed by the public: Coal, electricity, natural gas, water, sewage, telephone, and transportation. Broadband internet services (both fixed-line and mobile) are increasingly being included within the definition. |
| V                             |                         |  |
| Value (landscape)             |                         | Relative value or importance of a landscape's quality, special qualities including perceptual aspects such as scenic beauty, tranquility, or wildness, cultural associations or other conservation issues.   |
| Variable Messaging<br>Systems | VMS                     | An electronic traffic sign that provides travellers with information, for example alerts concerning special events or weather conditions.  |
| Vehicle movement              |                         | A journey made by a vehicle. This can either be a one way or two way trip.   |
| Vehicle recovery area         |                         | An area designated explicitly for vehicle recovery.  |
| Veteran tree                  |                         | Veteran trees are trees which have features of ancientness but at a younger age. These features include missing branches, hollow trunks and habitat features more commonly associated with ancient trees.  |
| Vibration                     |                         | A to-and-fro motion which oscillates about a fixed equilibrium position.   |
| Viewpoint                     |                         | A place from which something can be viewed.  |
| VISSIM                        |                         | A type of computer simulation software used in transportation assessments to model how traffic would interact on a given area of the road network.   |
| Visual amenity                |                         | Overall enjoyment of a particular area, surroundings, or views in terms of people's activities - living, recreating, travelling through, visiting, or working.   |
| Visual envelope               |                         | An area from which a project can be visible  |
| Visual receptor               |                         | Individuals and/or defined groups of people who potentially could be affected by a project.  |
| Visual sensitivity            |                         | Visual experience, be it sensitivity to light or visual clutter.   |



| Term                                    | Acronym or Abbreviation | Definition  |
|---|-------------------------|---|
| Vortex flow separator                   | VFS                     | High rate, rotary flow solids/liquid separation devices used in a variety of water quality applications.  |
| Vulnerability (climate)                 |                         | The degree to which a system/asset is exposed and resilient to adverse effects of climate change.   |
| w                                       |                         |   |
| Walkers, cyclists and horse riders      | WCH                     | A collective term used to describe pedestrians, cyclists and equestrians.   |
| Waste                                   |                         | Any substance or object which the holder disposes or intends / is required to dispose.  |
| Wastewater treatment works              | WwTW                    | A facility that treats waste water by removing contaminants.  |
| Wastewater                              |                         | Water that has been used in the home, in a business or as part of an industrial process.  |
| Water Framework Directive               | WFD                     | A European Union Directive which commits member states to achieve good status of all waterbodies (both surface and groundwater), and also requires that no such waterbodies experience deterioration in status. Good status is a function of good ecological and good chemical status, defined by a number of elements. |
| Water Framework Directive<br>Assessment |                         | Assessment to identify how the project has the potential to affect each of the water body's quality/quantity elements and whether it could lead to non-compliance with the Water Framework Directive.   |
| -                                       | WebTAG                  | See Transport Analysis Guidance.  |
| Wetness class                           |                         | Soil wetness is classified according to the depth and duration of waterlogging in the soil profile. Six wetness classes are identified, ranging from 'very well drained' to 'very poorly drained'.  |
| Wildlife Trust                          |                         | The Wildlife Trusts represent the Royal Society of Wildlife Trusts and include 46 local Wildlife Trusts in the United Kingdom, the Isle of Man and Alderney. Wildlife Trusts are individual charitable Trusts.  |
| Windrow                                 |                         | A long, narrow accumulation of material formed while performing construction operations.  |



| Term                                | Acronym or<br>Abbreviation | Definition  |
|-------------------------------------|----------------------------|---|
| World Health Organisation           | WHO                        | An agency of the United Nations whose role is to direct and coordinate international health within the United Nations system and to lead partners in global health responses.   |
| World Heritage Site                 |                            | World Heritage is the designation for places on Earth that are of outstanding universal value to humanity and as such, have been inscribed on the World Heritage List to be protected for future generations to appreciate and enjoy.   |
| Worst-case assumption (or scenario) |                            | An assumption adopted within an Environmental Impact Assessment which identifies a scenario or parameter that would likely result in the maximum environmental effect (termed the worst-case). This is typically applied where uncertainty exists over the detail of a particular project component or approach to project delivery, for which a basis of assessment is needed. |
| Written Schemes of Investigation    | WSI                        | Documents which set out the approach to undertaking archaeological monitoring of ground investigation works.  |
| z                                   |                            |   |
| Zone of Influence                   | Zol                        | The geographic area (or timescale) over which existing environmental conditions are likely to be influenced by change.  |
| Zone of visual influence            |                            | The area within which a project can have an influence or effect on visual amenity.  |
| Zone of theoretical visibility      | ZTV                        | Map produced (usually digitally) to specific criteria to illustrate the area(s) from which a project can theoretically be visual.   |