

Main Report

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Abbreviations

AADT	Annual Average Daily Traffic
ACoW	Archaeological Clerk of Works
AD	Anno Domini
ADMS	Atmospheric Dispersion Modelling Software
ALGE	Association of Local Government Ecologists
AM	Ante Meridiem (Before Noon)
AQAP	Air Quality Action Plan
AQLV	Air Quality Limit Value
AQMA	Air Quality Management Areas
ARN	Affected Road Network
ATC	Automatic Traffic Counters
AWI	Ancient Woodland Inventory
BC	Before Christ
BCR	Benefit-Cost Ratio
BCT	Bat Conservation Trust
BGS	British Geological Survey
BHS	British Horse Society
BNL	Basic Noise Level
BoCC	Birds of Conservation Concern
BPM	Best Practicable Means
BTO	British Trust for Ornithology
CA	Conservation Area
CAFE	Clean Air for Europe
CAFS	Clean Air for Scotland
CAR	Water Environment (Controlled Activities) Regulations 2011
CBC	Common Bird Census
CCTV	Closed-Circuit Television
CD&E	Construction, Demolition and Excavation
CEC	City of Edinburgh Council
CEMP	Construction Environmental Management Plan
CIEEM	Chartered Institute of Ecology and Environmental Management
Ch.	Chainage
ClfA	Chartered Institute for Archaeologists
CMS	Carbon Management System
CNMA	Candidate Noise Management Areas
CoPA	Control of Pollution Act
CPO	Compulsory Purchase Order
CRTN	Calculation of Road Traffic Noise
CSci	Chartered Scientist
D&B	Design and Build
dB	Decibel
DEFRA	Department of Environment, Food and Rural Affairs
DM	Do Minimum
DMRB	Design Manual for Roads and Bridges
DS	Do Something
DT	Diffusion Tube
EclA	Ecological Impact Assessment

EcoCoW	Ecological Clerk of Works
ECoW	Environmental Clerk of Works
EFT	Emission Factor Toolkit
EIA	Environmental Impact Assessment
ELC	East Lothian Council
ELDP	Edinburgh Local Development Plan
ELLDP	East Lothian Local Development Plan
END	Environmental Noise Directive
EPA	Environmental Protection Act 1990
EPS	European Protected Species
EPUK	Environmental Protection UK
ES	Environmental Statement
EU	European Union
GDL	Gardens and Designed Landscape
GI	Ground Investigation
GIS	Geographical Information System
GLVIA	Guidelines for Landscape and Visual Impact Assessment
GWDTE	Groundwater-Dependent Terrestrial Ecosystems
Ha	Hectare
HDV	Heavy Duty Vehicle
HER	Historic Environment Record
HES	Historic Environment Scotland
HGV	Heavy Goods Vehicle
HLA	Historic Land-use Assessment
HSI	Habitat Suitability Index
IAN	Interim Advice Note
IAQM	Institute of Air Quality Management
ICD	Inscribed Circle Diameter
IEEM	Institute of Ecology and Environment Management
IEMA	Institute of Environmental Management and Assessment
IIP	Infrastructure Investment Plan
INNS	Invasive Non-Native Species
LAQM	Local Air Quality Management
LB	Listed Building
LBAP	Local Biodiversity Action Plan
LBS	Local Biodiversity Site
LCA	Landscape Character Area
LCfA	Land Capability for Agriculture
LDP	Local Development Plan
LGV	Large Goods Vehicle
LNCS	Local Nature Conservation Sites
LNR	Local Nature Reserve
LP	Local Plan
LT	Long Term
LVIA	Landscape and Visual Impact Assessment
LWS	Local Wildlife Sites
M&WMS	Materials and Waste Management Strategy
MBGL	Metres Below Ground Level
MCZ	Marine Conservation Zone
MCC	Manual Classified Counts

MIOA	Member of the Institute of Acoustics
MLC	Midlothian Council
MLDP	Midlothian Local Development Plan
MLURI	Macaulay Land Use Research Institute
mOD	Metres relative to Ordinance Data
MoU	Measure of Uncertainty
MPA	Marine Protection Area
MPI	Major Projects' Instructions
MSW	Municipal solid waste
MtCO _{2e}	Million tonnes of Carbon Dioxide Equivalent
MTRIP	Major Transport Infrastructure Project
NCAP	National Collection of Aerial Photographs
NMA	Noise Management Area
NMU	Non-Motorised User
NNR	National Nature Reserve
NO ₂	Nitrogen Dioxide
NO _x	Oxides of Nitrogen
NPF	National Planning Framework
NPV	Net Present Value
NSA	National Scenic Area
NTS	National Transport Strategy
OHL	Overhead Line
OS	Ordnance Survey Ltd.
Pa	Pascals
PAH	Polycyclic Aromatic Hydrocarbon
PAN	Planning Advice Note
PCM	Pollution Climate Mapping
PM	Post Meridiem (After Noon)
PM ₁₀	Fine particulate matter (less than 10 µm in diameter)
PM _{2.5}	Fine particulate matter (less than 2.5 µm in diameter)
PPV	Peak Particle Velocity
PRF	Potential Roost Feature
PSV	Public Service Vehicle
RCAHMS	Royal Commission on the Ancient and Historical Monuments of Scotland
RIE	Royal Infirmary Edinburgh
RoD	Record of Determination
RoW	Right of Way
SAC	Special Area of Conservation
SBL	Scottish Biodiversity List
ScARF	Scottish Archaeological Research Framework
SDA	Strategic Development Area
SDP	Strategic Development Plan
SEED	South East Edinburgh Development Company
SEPA	Scottish Environment Protection Agency
SESplan	Strategic Development Planning Authority for Edinburgh and South East Scotland
SEStran	South East of Scotland Transport Partnership
SLA	Special Landscape Area
SM	Scheduled Monument
SNH	Scottish Natural Heritage
SPA	Special Protection Area

SPEN	Strategic Power Energy Networks
SPP	Scottish Planning Policy
SRM12	SEStran Regional Model 2012
SSD	Stopping Sight Distance
SSSI	Site of Special Scientific Interest
ST	Short Term
STAG	Scottish Transport Appraisal Guidance
STPR	Strategic Transport Projects Review
SuDS	Sustainable Urban Drainage System
SWMP	Site Waste Management Plan
tCO _{2e}	Tonnes of Carbon Dioxide Equivalent
TMfS14	Transport Model for Scotland 2014
TRL	Transmit-Receive-Longitudinal
UK	United Kingdom
VP	Viewpoint
WCA	Wildlife and Countryside Act 1981
WCHAR	Walking, Cycling, Horse Riding Assessment and Review
WFD	Water Framework Directive
WHS	World Heritage Sites
WRAP	Waste and Resources Action Programme
ZTV	Zone of Theoretical Visibility

Glossary

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.
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 development project.
Aggregate	Granular material (e.g. sand and gravel or crushed rock) that can be used for building and/or civil engineering purposes (e.g. for concrete 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 Limit Value (AQLV)	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 Area (AQMA)	If a local authority identifies any locations within its boundaries where the air quality objectives are not likely to be achieved, it must declare the area as an air quality management area. The local authority is subsequently required to put together a local air quality action plan.
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.
Alluvial Deposits	Natural materials deposited within and adjacent to rivers.
Ambient Noise	Ambient noise is the total noise in a given location, usually composed of many sources, near and far, such as road traffic noise, railway noise, birdsong, wind rustling vegetation etc.
Amenity	The relative pleasantness of a journey, or the ability of communities to achieve enjoyment and/ or quality of life.
Ancient woodland	Land that has been continually wooded since at least the year 1600AD.
Annual Average Daily Traffic (AADT)	A measure used in transportation engineering and is the number of vehicles that will use a new or improved road on an average day.

Annual Average Weekday Traffic	The average 24-hour traffic volume occurring on weekdays throughout a full year.
Annual Average Weekly Traffic	Traffic data obtained by calculating weekly traffic flows and then calculating the annual average. Often used in predicting noise levels and air quality, usually in conjunction with other parameters such as average vehicle speed and percentage heavy vehicles.
Aquifer	An underground layer of water-bearing permeable rock, rock fractures or unconsolidated materials (gravel, sand or silt).
At-grade Junction	An intersection of highways where the crossing is at the same level.
Attenuation Pond	A pond designed to hold back water and release it at a controlled flow rate.
Base Year	Reflects the year which the data has been collected.
Baseline	The current environmental conditions against which potential impacts/effects are identified.
Baseline Conditions	The environment as it appears (or would appear) immediately prior to the implementation of the project together with any known or foreseeable future changes that will take place before completion of the project.
Baseline Study/ Survey	The process of research and fieldwork by which the current baseline conditions are established.
Bedrock	Rock that underlies loose deposits such as soil or alluvium.
Below Ground Level (bgl)	Term used to differentiate below ground from above ground.
Best and Most Versatile Land	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.
Biodiversity	The biological diversity of the earth's living resources. The total range of variability among systems and organisms at the following levels of organisation: bioregional, landscape, ecosystem, habitat, communities, species, populations, individuals, genes and the structural and functional relationships within and between these different levels.
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.
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.
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.
Calculation of Road Traffic Noise (CRTN)	A technical memorandum that describes the procedures for calculating noise from road traffic.
Carbon Footprint	The total greenhouse gas emissions associated with a particular policy or development.
Carriageway	The width of a highway that can be used by motorised vehicles and non-motorised users, formed by a number of lanes.
Catchment	A drainage/basin area within which precipitation drains into a river system and eventually into the sea.
Chainage	The distance of any point along a road, measured along the road centreline from a chosen origin or start point.
Climate	The climate can be described simply as the 'average weather', typically looked at over a period of 30 years. It can include temperature, rainfall, snow cover, or any other weather characteristic.
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.
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.
Compensation (Environmental)	Mitigation measures applied where nothing can be done to reduce an environmental impact or effect. An example is habitat and species relocation.
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.
Congestion	A situation where the volume of traffic is too great for the road, causing vehicles to slow down or stop, often caused by bottlenecks, traffic incidents and junction design.
Construction	Any activities, which take place during the construction phase, including temporary land take.
Construction and Demolition Waste	Consists of unwanted material produced directly or indirectly as a result of the construction phase.
Construction Compound	A defined area (usually fenced off) where construction activity takes place
Construction Design and Management (CDM) Regulations 2015	The Construction (Design & Management) Regulations (CDM 2015) are the main set of regulations for managing the health, safety and welfare of construction projects.
Construction Environmental Management Plan (CEMP)	A plan prepared by a contractor which sets out how a construction project will avoid, minimise or mitigate effects on the environment and surrounding area and the protocols to be followed in implementing these measures, in accordance with environmental commitments.
Construction Plant	Portable construction machinery and equipment.
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.
Culvert	A tunnel (pipe or box shaped) that carries a stream or open drain under a road or railway.
Cumulative Effects	Effects upon the environment that result from the incremental impact of an action when added to other past, present or reasonably foreseeable actions. Each impact by itself may not be significant but can become a significant effect when combined with other impacts.
Cutting	An earthwork to establish the road foundations (along with embankments), where the road is cut into the landscape, providing potential for visual screening and noise attenuation.
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.
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.
Design Manual for Roads and Bridges (DMRB)	A series of 15 volumes that provide standards, advice notes and other published documents relating to the design, assessment and operation of trunk roads, including motorways in the United Kingdom, and, with some amendments, the Republic of Ireland.
Design-Development	The process in which technical specialists (engineers and environmentalists) refine the design for the various elements of a development project.
Detailed Assessment	Method applied to gain an in-depth appreciation of the beneficial and adverse consequences of the project and to inform project decisions. Detailed Assessments are likely to require detailed field surveys and/or quantified modelling techniques.
Determination	The formal judgement as to whether a project requires statutory Environmental Impact Assessment or not.
Diffusion Tube Monitoring	Diffusion tubes are a pollutant specific method of monitoring and measuring different pollutants, including measuring oxides of nitrogen (NOx). Diffusion tubes passively absorb the pollutant to which they are exposed in each place over a period, generally 2-4 weeks, and the tube is then returned to the laboratory for analysis.

Direct Effect	An effect arising from an impact attributable to a project component or activity.
Directive	Legal obligations imposed on European member states by the European Union.
Disbenefit	A disadvantage or loss resulting from something.
Dispersion Modelling (Air Quality)	An advanced dispersion model used to model the air quality impact of projects.
Diverge	The point where two streams of traffic split and go in different directions.
Do-Minimum (DM) Scenario	The Do-Minimum forecast scenario in the Opening/ Design Year is the base road and traffic network against which alternative improvements can be assessed. In many cases, the definition of the Do-Minimum is straightforward; it is simply the Do-Nothing scenario. However, 1 or more of the following 4 cases may arise, in which the 'Do-Minimum' differs from the 'Do-Nothing': i) The case where works will be carried out regardless of whether or not the Do-Something scheme is built. ii) The case where the existing network may be improved to form a 'Do-Minimum' scheme which can be tested as an alternative to carrying out major Do-Something improvements. iii) The case where traffic conditions can be improved without significant capital expenditure. iv) The case where the area covered by the modelled network includes road proposals other than the one under immediate consideration.
Do-Nothing (DN) Scenario	The Do-Nothing forecasting scenario is simply the existing network without modification in the Opening/ Design Year.
Do-Something (DS) scenario	The Do-Something forecast scenario is the road proposal under consideration in the Opening/ Design Year.
Driver Stress	The adverse mental and physiological effects experienced by a driver traversing a road network.
Dumb-Bell	A type of grade-separated junction which takes the form of a roundabout either side of a major road, linked by a bridge.
Dust	All airborne particulate matter.
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.
Ecosystem	Biological community of interacting organisms (e.g. plants and animals) and their environment.
Effect	Term used to express the consequence of an impact (expressed as the 'significance of effect'), which is determined by correlating the magnitude of the impact (or change) to the importance, value or sensitivity of the receptor or resource, in accordance with defined significance criteria.
Embankment	Artificially raised ground, commonly made of earth material, such as stone, on which the carriageway is laid.
Embedded Mitigation	Mitigation measures incorporated (embedded) into the design of a development project, for example earthworks to visually screen traffic movements in available views.
Emission Factor	Tool used to assist local authorities in carrying out Review and Assessment of local air quality as part of their duties under the Environmental Act 1995.
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.
Enhancement	A 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.
Environmental Assessment	A method and process by which information about environmental effects is collected, assessed and used to inform decision-making.
Environmental Effect	The consequence of an action (impact) upon the environment such as the decline of a breeding bird population as a result of the removal of hedgerows and trees.
Environmental Impact	The change in the environment from a development such as the removal of a hedgerow.

Environmental Impact Assessment (EIA)	A process by which information about environmental effects of a proposed development is collected, assessed and used to inform decision making. For certain projects, EIA is a statutory requirement.
Environmental Statement (ES)	A document produced in accordance with the EIA Directive as transposed into UK law by the EIA Regulations to report the results of an EIA.
Environmental (ECoW)/ Ecological Clerk of Works (EcoCoW)	Supports compliance with legislation and planning conditions but also provides advice and guidance throughout construction.
European Protected Species	Species of plants and animals (not birds) which are protected by European law.
European Site	The generic term used to describe the following designated sites: <ul style="list-style-type: none"> • Special Areas of Conservation (SACs) and Special Protection Areas (SPAs); • Sites that are in the process of designation as SACs and SPAs - these are known as proposed SACs (pSACs), candidate SACs (cSACs), potential SPAs (pSPAs) and Sites of Community Importance (SCIs), depending on the type of designation and point of progression through the designation process; and • Ramsar Sites.
Excavated Material	Largely natural soil and rock material that is removed from the ground during construction.
Exceedance (Air Quality)	Where pollutant concentrations exceed an air quality standard.
Facade	The noise level at 1 m from a building façade. Noise is reflected from hard surfaces, such as a building façade, producing a slightly higher noise level than if the building was not there. CRTN specifies a façade correction of +2.5 dB
Fill	Material used to artificially raise the existing ground levels.
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 development.
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.
Future Baseline	The situation and conditions that would prevail should a proposed development not proceed. Predicted impacts are compared against this theoretical scenario.
Geomorphology	The study of landforms and the processes which create them.
Grade-Separated Junction	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.
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	Atmospheric gases such as carbon dioxide, methane, chlorofluorocarbons, nitrous oxide, ozone, and water vapour that absorb and emit infrared radiation emitted by the Earth's surface, the atmosphere and clouds.
Ground Investigation (GI)	An intrusive investigation undertaken to collect information relating to the ground conditions, normally for geotechnical or land contamination purposes.
Groundwater	All water which is below the surface of the ground and within the permanently saturated zone.
Habitat	The natural home or environment of an animal, plant, or other organism.
Habitat Regulations Assessment (HRA)	A Habitat Regulations Assessment is required where a project may have significant effects on a site by affecting its function to support protected habitats or species. Its purpose is to assess the implications of the proposal in respect of the site's 'conservation objectives'. The assessment is undertaken by the competent authority, in this case the Secretary of State.

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.
Heavy Goods Vehicle	A commercial carrier vehicle with a gross vehicle weight of more than 3.5 tonnes.
Hectare	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.
Highways Agency Water Risk Assessment Tool (HAWRAT)	A spreadsheet-based application used to determine whether highway runoff is likely to have an ecological impact on surface watercourses.
Highways England	The government agency responsible for the operation, maintenance and improvement of England's trunk roads and motorways.
Historic Environmental 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.
Hydrogeology	The nature, distribution and movement of groundwater in soils and rocks, including in aquifers.
Impact	Change that is caused by an action; for example, land clearing (action) during construction which results in habitat loss (impact).
Indirect Effect	An effect arising from additional development works which are as a result of the Scheme.
Inert waste	Defined in Article 2(e) of EU Landfill Directive (1999/31/EC) as waste that does not undergo any significant physical, chemical or biological transformations: <ul style="list-style-type: none"> • Inert waste 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 • The 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 and/ or groundwater.
Infrastructure	The facilities, services and businesses in a defined area.
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.
Invasive Species	Non-native UK plants that are invasive, for example Japanese Knotweed.
Junction	A place where two roads meet, regardless of design or layout.
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.
Land Take	Land required for the Scheme
Landscape Character Area (LCA)	Areas of landscape that have a broadly consistent pattern of topography, land use and vegetation cover.
Laydown Area	An area used for the temporary storage of construction equipment and supplies.
Light Goods Vehicle	A motor vehicle used to carry goods with a total mass of up to 3.5 tonnes.
Link	A section of road between two junctions.
Listed Building	A building of special architectural or historic interest. Listed buildings are graded I, II* or II, with Grade I being the highest. Listing includes the interior as well as the exterior of the building.
Local Air Quality Management	A key part in the UK Government's and the Devolved Administrations' strategies to achieve the air quality objectives.
Local Area Model	Traffic model which is used to test the impact of the Scheme on the local road network.
Local Biodiversity Action Plan	A plan that identifies threatened species and habitats and seeks to protect and restore biological systems.

Local Planning Authority	The local authority or council that is empowered by law to exercise planning functions.
Low-Noise Surfacing	See thin surface course.
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 of Effect	The actual change taking place to the environment, for example, the extent of land take or predicted change in noise levels.
Mainline	The carriageway carrying the main flow of traffic, generally traffic passing straight through a junction or interchange.
Merge	The point where two different traffic flows come together and continue as one.
Mitigation	Measures including any process, activity, or design to avoid, reduce, remedy or compensate for negative environmental impacts or effects of a development.
Modelling	The process of estimating changes within an area of interest under a specific set of conditions.
Monitoring	A continuing 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.
National Cycle Network	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 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 Classification (NVC)	A comprehensive classification and description of the plant communities of Britain, administered by the Joint Nature Conservation Committee.
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.
Noise barrier	A solid construction that reduces unwanted sound. It may take many forms including: engineering cutting; retaining wall; noise fence barrier; landscape earthworks; a 'low level' barrier on a viaduct; a parapet barrier on a viaduct; or any combination of these measures. Also called an attenuation barrier.
Noise Sensitive Receptor	These comprise mainly residential buildings, but also include educational buildings, hospitals and places of worship.
Non-Hazardous Waste	Any waste not defined as 'hazardous' under Directive 91/689/EEC. Examples include soils from ground/site clearance and demolition wastes.
Non-Motorised Users (NMU)	A collective term used to describe pedestrians, cyclists and equestrians (horse riders).
Non-Significant Effect	An effect, which is unlikely to have an influence on the decision-making process.
Non-Technical Summary (NTS)	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.
Operation	Any activities forming part of or associated with the operation of the Scheme.
Operational	The functioning of a project on completion of construction.
Ordnance Survey (OS)	The national mapping agency for the UK.
Overbridge	A bridge crossing over a transport corridor (e.g. a highway).
Particulate matter (PM)	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.
Permanent Effect	An effect, which is irreversible or likely to persist for the foreseeable life of the Scheme.
Permanent Land take	A requirement for land that will be needed as part of the operation phase of the Scheme

Personal Protective 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 proposed development onto a photograph for the purposes of creating an illustrative representation of potential changes to existing views.
Planning Statement	A document prepared by applicants which provides background and technical information on a development project, the purpose being to inform determination of a planning application by demonstrating its compliance with relevant planning policy.
Pollution Climate Mapping (PCM) model	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. These models are run by Ricardo Energy & Environment on behalf of Defra.
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.
Preferred Option	The chosen design option that most successfully achieves the project objectives and becomes subject to further design and assessment.
Protected Species	Species of wild plants, birds and animals which are afforded protection through legislative provisions.
Ramsar (Site)	Wetland sites that are of international importance, as designated under Article 2(1) of the Convention on Wetlands of International Importance especially as Waterfowl Habitat. Ramsar (Iran), 2 February 1971. UN Treaty Series No. 14583.
Receptor	A defined individual environmental feature (usually associated with population, fauna or flora) that has potential to be affected by a project.
Remediation	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.
Residual Effect	The predicted consequential change on the environment from the impacts of a development after mitigation.
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.
Right of Way (RoW)	A highway where the public has the right to walk. It can be a footpath (used for walking), a bridleway (used for walking, riding a horse and cycling), or a byway that is open to all traffic (including motor vehicles).
Risk Assessment	An assessment of the probability of a hazard occurring that could result in an impact.
Roundabout	A circular, one-way junction at which other roads meet and terminate.
Runoff	The flow of water over the ground surface.
Scheduled Monument	A 'nationally important' archaeological site or historic building, given protection against unauthorised change and included in the Schedule of Monuments kept by the Secretary of State for Culture, Media and Sport. The protection given to scheduled monuments is given under the Ancient Monuments and Archaeological Areas Act 1979.
Scheme	All works associated with the A720 Sheriffhall Roundabout Scheme
Scope	The extent of coverage of EIA.
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 for planning permission, 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.
Sediment	Naturally occurring material that is broken down by processes of weathering and erosion; sand, gravel and silt.
Setting (Cultural Heritage)	The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive, negative or neutral contribution to the significance of an asset and may affect the ability to appreciate it.
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 (Non-Motorised Users)	The perceived separation of residents from facilities and services they use within their community caused by new or improved roads, or by changes in traffic flows.
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.
Site of Importance for Nature Conservation (SINC)	Sites designated by local authorities for the purpose of conserving wildlife.
Site of Special Scientific 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 Plan (SWMP)	A plan that is used to outline how a construction project will avoid, minimise or mitigate effects on waste production and handling on the environment and surrounding area.
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.
Span	The horizontal distance between two supports of a structure (e.g. piers of a bridge or viaduct).
Special Area of Conservation (SAC)	Sites designated under EU legislation for the protection of habitats and species considered to be of European interest.
Stakeholder	An organisation or individual with a particular interest in a development project.
Standard Mitigation	Measures comprising standard techniques and activities which are implemented during the construction of a development project to protect the environment and/or mitigate adverse effects, for example the covering of exposed materials to reduce dust emissions.
Statutory Consultee	Organisations and bodies, defined by statute, which must be consulted on relevant planning matters.
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).
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	Waters including rivers, lakes, loughs, reservoirs, canals, streams, ditches, coastal waters and estuaries.
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.
Temporary Effect	An effect which is of limited duration, due to either the cessation of the impact giving rise to it or the ability of the environment to accommodate or recover from it.
Temporary Land Take	A requirement for land that will be needed during the construction phase of the Scheme only, and can be returned to other use afterwards
Traffic	The total volume of vehicle traffic on a road flowing past a certain point over a year, divided by 365 days.
Transport Scotland	The government agency responsible for the operation, maintenance and improvement of Scotland's trunk roads and motorways.

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.
Trunk Road	A road operated and maintained in Scotland by Transport Scotland
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)
Underbridge (or Underpass)	A bridge crossing under a transport corridor (e.g. a highway).
Unexploded ordnance (UXO)	Explosives that did not explode when deployed and thus still pose a risk of detonation.
Upgrade	Refers to the physical improvement of a road, through widening of the carriageway or rebuilding a junction.
Utilities	The term utilities can also refer 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.
Vehicle Movement	A journey made by a vehicle. This can either be a one way or two-way trip.
Vehicle Restraint Systems	System installed on a road to provide a level of containment for an errant vehicle such as a safety barrier.
Viewpoint	A place from which something can be viewed.
Visual Amenity	The overall pleasantness of the views people enjoy of their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through an area.
Visual Receptor	People who may have a view of a proposed development during construction or operation.
Water Framework Directive (WFD)	The Water Framework Directive (WFD) introduced a new system for monitoring and classifying the quality of surface and ground waters.
Worst-Case 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 development component or approach to project delivery, for which a basis of assessment is needed.
Zone of Theoretical Visibility (ZTV)	A map, usually digitally produced, showing areas of land within which, the Scheme is theoretically visible.