Environmental Statement

Volume 2i: Scheme-wide Assessment

Acronyms, abbreviations and glossary

Acronyms and abbreviations

Abbreviation	Definition
AADT	Annual Average Daily Traffic
AA-EQS	Annual average EQS
ABD	Area benefiting from flood defences
AC	Alternating Current
AEW	Aerial Earth Wire
AIMD	Active Implemented Medical Devices
AL	Action Level
ALARP	As Low As Reasonably Possible
ALC	Agricultural Land Classification
ANC	Association of Noise Consultants
AOD	Above Ordnance Datum
AONB	Area of Outstanding Natural Beauty
AQMA	Air Quality Management Area
AQS	Air Quality Standards
ATC	Automatic Traffic Count
AVR	Accurate Visual Representations
AWB	Artificial Water Body
AWI	Ancient Woodland Inventory
BAP	Biodiversity Action Plan
BAT	Best available techniques
BB93	Building Bulletin 93
BEIS	Business, Energy and Industrial Strategy
Bgl	Below ground level
BGS	British Geological Survey
BME	Black and minority ethnic
BMV	Best and Most Versatile
BNL	Basic Noise Level
BOD	Biochemical oxygen demand
BPM	Best Practicable Means
BREEAM	Building Research Establishment Environmental Assessment Method
BS	British Standard
BWMD	Body Worn Medical Devices
CA	Coal Authority
CCG	Clinical Commissioning Group
CCR	Climate Change Resilience
CD&E	Construction, Demolition and Excavation
CDM	Construction Design and Management
CIA	Cumulative Impact Assessment
CIEEM	Chartered Institute of Ecology and Environmental Management
CIfA	Chartered Institute for Archaeologists
CIMP	Conservation Implementation Management Plan
CIRIA	Construction Industry Research and Information Association
CL:AIRE	Contaminated Land: Applications in Real Environments
CLP	Classification, Labelling and Packaging
CMS	Continuous Monitoring Station
CO_2	Carbon Dioxide
CoCP	Code of Construction Practice
COMAH	Control of Major Accident Hazards
CoPA	Control of Pollution Act 1974
COSHH	Control of Substances Hazardous to Human Health

Abbreviation	Definition
CRN	Calculation of Railway Noise
CRTN	Calculation of Road Traffic Noise
CSM	Conceptual Site Model
CTMP	Construction Traffic Management Plan
dB	Decibel
DCLG	Department for Communities and Local Government
DEFRA	Department for Environment, Food and Rural Affairs
DfE	Department for Education
DfT	Department for Transport
DIA	Disability Impact Assessment
DM	Do Minimum
DMOY	Do Minimum Opening Year
DMRB	Design Manual for Roads and Bridges
DMU	Diesel multiple unit
DN	Do-Nothing
DNO	Distribution Network Operator
DoC	Duty of Care
DoE	Department of the Environment
DPE	Designated Project Engineer
DS	Do Something
DSFY	Do Something Future Year
DTM	Digital Terrain Model
DWP	Department for Work and Pensions
DWS	Drinking Water Standards
EA	Environment Agency
EC	European Council
EcIA	Ecological Impact Assessment
eDNA	Environmental DNA
EIA	Environmental Impact Assessment
ELC	European Landscape Convention
EM	Electromagnetic
EMC	Electromagnetic Compatibility
EME	Electromagnetic Environment
EMF	Electromagnetic Field
EMI	Electromagnetic Interference
EN	Euro Norm
EPA	Environmental Protection Act
EPSL	European Protected Species Licence
EPSM	European Protected Species Mitigation
EQS	Environmental Quality Standards
ES	Environmental Statement
EU	European Union
FHS	Fish Habitat Survey
FRA	Flood Risk Assessment
GAC	Generic Assessment Criteria
GCN	Great Crested Newt
GCR	Geological Conservation Review
GfCN	Guidelines for Community Noise
GI	Ground Investigations
GIS	Geographical Information System
GLVIA	Guidelines for Landscape and Visual Impact Assessment
GPLC	Guiding Principles for Land Contamination

Abbreviation	Definition
GQRA	Generic Quantitative Risk Assessment
GRIP	Governance for Railway Infrastructure Project
GWDTE	Groundwater Water Dependent Terrestrial Ecosystems
H:W	Height to width ratio
HA	Highways Authority
Ha	Hectares
HDV	Heavy Duty Vehicle
HER	Historic Environment Record
HGV	Heavy Goods Vehicle
HMS	Habitat Modification Scores
HMWBs	Heavily Modified Water Bodies
HPI	Habitats of Principal Importance
HSI	Habitat Suitability Index
HSMS	Health and Safety Management System
HTM	Health Technical Memorandum
IAQM	Institute of Air Quality Management
ICCI	In-Combination Climate Change Impacts
ICNIRP	International Commission on Non-Ionizing Radiation Protection
IDB	Internal Drainage Board
IDP	Infrastructure Delivery Plan
IEF	Important Ecological Features
IEMA	Institute of Environmental Management and Assessment
IMD	Indices of multiple deprivation
INNS	Invasive non-native species
IPC	Integrated Pollution Control
JHWS	Joint Health and Wellbeing Strategy
JSNA	Joint Strategic Needs Assessment
KJSA	Kirklees Joint Strategic Assessment
KLP	Kirklees Local Plan
KTM	Kirklees Traffic Model
kV	Kilovolt
LAQM	Local Air Quality Management
LBAP	Local Biodiversity Action Plan
LCA	Landscape Character Area
LCRM	Land Contamination: Risk Management
LEMP	Landscape and Ecological Management Plan
LEP	Leeds City Region Enterprise Project
LGS	Local Geodiversity Sites
LHA	Local Highways Authority
LI	Landscape Institute
LiDAR	Light Detection and Ranging - Method of measuring distances using laser light which can be used to make digital 3-D representations of the target
LLFA	Lead Local Flood Authority
LMS	London, Midland and Scotland Railway
LNR	Local Nature Reserve
LNWR	London & North Western Railway
LOAEL	Lowest Observed Adverse Effect Level
LoR	Line of Route
LSOAs	Lower Super Output Areas
LWS	Local Wildlife Sites
M2D2L	Mirfield to Dewsbury to Leeds
MAFF	Ministry of Agriculture, Fisheries and Food

Abbreviation	Definition
MAGIC	Multi-Agency Geographic Information for the Countryside
MCC	Manual Classified Counts
MCTC	Manual Classified Turning Counts
MMP	Materials Management Plan
MMS	Materials Management Strategy
MMT	Mobile Maintenance Train
Mph	Miles per hour
MSA	Mineral Safeguarding Areas
MSOA	Middle Layer Super Output Area
mT	milli-tesla
NCA	National Character Area
NCN	National Cycle Network
NE	Natural England
NERC	Nature Environment Research Council
NGR	National Grid Reference
NHBC	National House Building Council
NHLE	National Heritage List for England
NHS	National Health Service
NIA	Noise Important Area
NIR	Noise Insulation Regulations
NIRR	Noise Insulation (Railways and Other Guided Transport Systems) (Amendments) Regulations
NKOR	North Kirklees Orbital Route
NLS	National Library of Scotland
NMP	Nuisance Management Plan
NMU	Non-Motorised User
NN NPS	National Networks National Policy Statement
NNG	Night Noise Guidelines
NNR	National Nature Reserve
NO_2	Nitrogen Dioxide
NOEL	No Observed Effect Level
NoEP	The North of England Programme
NPPF	National Planning Policy Framework
NPPG	National Planning Practice Guidance
NPR	Northern Powerhouse Rail
NPS	National Policy Statement
NPSE	Noise Policy Statement for England
NSR	Noise and vibration Sensitive Receptors
NVC	National Vegetation Classification
NVMP	Nosie and Vibration Management Plan
NVZ	Nitrate Vulnerable Zone
OHP	Overhead power lines
OLE	Overhead Line Equipment
ONS	Office of National Statistics
O&RR	Office of Rail Regulation
OS	Ordnance Survey
PA	Public Address
PAHs	Polyaromatic hydrocarbons
PBRA	Preliminary bat roost assessments
PCB	Polychlorinated Biphenyl
PCL	Potential contaminant linkage
PCT	Primary Care Trust

Abbreviation	Definition
PFRA	Preliminary Flood Risk Assessment
PHE	Public Health England
PPE	Personal Protective Equipment
PPG	Professional Practice Guidance
PPGN	Planning Practice Guidance for Noise
PPICP	Pollution Prevention and Incident Control Plan
PPL	Potential Pollutant Linkage
PPV	Peak Particle Velocity
ProPG	Professional Practice Guidance
PRoW	Public Right of Way
pSAC	Potential Special Areas of Conservation
PSP	Principal Supply Point
pSPA	Potential Special Protection Area
PSYM	Predictive System for Multimetrics
RA93	Railways Act 1993
RBD	River Basin District
RBMP	River Basin Management Plan
RCS	River Corridor Survey
RFFP	Reasonably Foreseeable Future Projects
RHS	River Habitat Survey
RIGS	Regionally Important Geological Sites
RL	Reference Level
RoFR	Risk of Flooding from Reservoirs
RoFSW	Risk of Flooding from Surface Water
ROGS	Railways and Other Guide Transport Systems
RoWIP	Rights of Way Improvement Plan
RRAP	Road Rail Access Point
RSC	Return Screening Conductor
RSSB	Rail Safety and Standards Board
SAC	Special Areas of Conservation
SAGE	Stakeholder Advisory Group on EMFs
SATURN	Simulation and Assignment of Traffic to Urban Road Networks
SEP	Strategic Economic Plan
SFAIRP	So far as is reasonably practicable
SFRA	Strategic Flood Risk Assessment
SHA	Strategic Health Authority
SI	Statutory Instrument
SOAEL	Significant Observed Adverse Effect Level
SOAs	Super Output Areas
SPA	Special Protection Areas
SPZ	Source Protection Zone
SSSI	Sites of Special Scientific Interest
SSV	Soil Screening Values
T&CPA	Town and Country Planning Act
TA	Transport Assessment
TAG	Transport Analysis Guidance
TCA	Townscape Character Area
TfN	Transport for the North
TNRB	Transportation Noise Reference Book
tpa	Tonnes per Annum
TRU	Transpennine Route Upgrade
TSI	Technical Specification for Interoperability

Abbreviation	Definition
TWA	Transport Works Act
TWAO	Transport and Works Act Order
UK	United Kingdom
UKCP18	United Kingdom Climate Projections 2018
uPBT	ubiquitous, persistent bioaccumulative and toxic
UXO	Unexploded Ordnance
V/C	Volume-to-Capacity Ratio
VDV	Vibration Dose Value
VOC/SVOC	Volatile/semi-volatile organic compounds
VR	Verification Report
WaFD	Waste Framework Directive
WDI	Waste Data Interrogator
WEEE	Waste Electrical and Electronic Equipment
WFD	Water Framework Directive
WHO	World Health Organisation
WMS	Web map services
WNA	Waste Needs Assessment
WPA	Waste Planning Authority
WPZ	Water Protection Zone
WRA	Water Resources Act
WRCCAS	Weather Resilience and Climate Change Adaptation Strategy
WSI	Written Scheme of Investigation
WYAAS	West Yorkshire Archaeological Advisory Service
WYBG	West Yorkshire Bat Group
WYCA	West Yorkshire Combined Authority
WYCP	West Yorkshire Corporate Plan
WYE	West Yorkshire Ecology
WYJS	West Yorkshire Joint Services
ZoI	Zone of Influence
ZTV	Zone of Theoretical Visibility

Glossary

Term	Definition
Abutment	A structure built to support the lateral pressure of an arch or span.
Additional mitigation	Where embedded mitigation measures do not fully avoid or mitigate impacts, and the environmental topic assessments identify potential significant effects due to construction and/or operation of the Scheme, further mitigation measures are outlined to minimise potential impacts.
Affected Road Network (air quality)	The road network exceeding certain traffic change criteria defined for air quality purposes.
Air Quality Assessment Level	A general term used in IAQM guidance to refer to an air quality objective, EU Limit or target value.
Air Quality Limit Value Regulations 2010	UK Regulations to limit the levels of air borne pollutants emitted from industry
Air Quality Management Areas	An area designated by a local authority as being at risk of not meeting air quality standards
Air Quality Standards	Mandatory air quality criteria that apply to the UK as specified by the 2007 Air Quality Strategy for the UK and the 2008 European Directive Limit Values which are incorporated into the Regulations
Air Quality Strategy	The Air Quality Strategy for England, Scotland, Wales and Northern Ireland provides details of national air quality standards and objectives for a number of local air pollutants
Alliance	Network Rail has commissioned the TRU West Alliance to design and deliver the West of Leeds section of the TRU. The Alliance is made up of the client, principal designer and principal contractor organisations amongst others contributing to the design and delivery of the Scheme.
Amenity	The pleasantness or attractiveness of a place. Amenity may be affected by a combination of factors such as: sound, noise and vibration, dust/air quality, traffic/congestion and visual impacts.
Annual Average Daily Traffic	Measurement of the total volume of traffic on a road on average throughout the year divided by 365 days.
Application Rules	These are the statutory rules of procedure for making applications under the Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2006. The document describes the procedures for TWAO applications and sets out the information that must be provided within an ES.
Artificial Ground	The term used for areas where the ground surface has been significantly modified by human activity.
Artificial water body	A surface water feature which has been created where no water body existed previously e.g. canals.
Automatic Traffic Count	Means of determining traffic levels.
A-weighting	Frequency corrections applied to instrument measured sound levels to account for the relative loudness perceived by the human ear
Ballast	The material used to support and secure the railway track, usually made up of granular material.
Barotrauma	Injury caused by rapid air pressure reduction near fast moving objects
Baseline	The conditions that exist without a scheme at the time an assessment or survey is undertaken.
BBW	Engineer's line reference for the Bradley Junction to Bradley Wood Junction railway line, used to identify individual structures and mileages.
Biodiversity	The diversity of different types of life found on Earth. 'Biodiversity' usually refers to a measure of the variety of organisms present in different ecosystems. It can refer to genetic variation, ecosystem variation, or species variation (number of species) within an area, biome, or the planet.

Term	Definition
Biodiversity Net Gain	An approach to development that leaves biodiversity in a better state than before. Where a development has an impact on biodiversity it encourages developers to provide an increase in appropriate natural habitat and ecological features over and above that being affected in such a way it is hoped that the current loss of biodiversity through development will be halted and ecological networks can be restored.
Blockade	The closure of railway line to rail traffic for the purpose of maintenance, improvement or construction.
Bridge deck	A bridge deck is the surface of the bridge.
Byway	Byways are public rights of way which can either be restricted or open to all traffic. Restricted byways can be used by any transport without a motor and mobility scooters or powered wheelchairs. Byways open to all traffic can be used by any kind of transport, including cars (but they're mainly used by walkers, cyclists and horse riders).
Cantilever	OLE structure comprising horizontal or near horizontal members supporting the OLE from a single mast on one side of the track.
Carbon Dioxide	A primary greenhouse gas emitted through human activities as well as natural sources.
Cess	The area either side of the railway immediately off the ballast shoulder. This usually provides a safe area for authorised workers to stand when trains approach.
Chainage	A hypothetical line used to measure distance, often corresponding to the centre of a straight road or railway. Chainage is a unit of measurement equalling 66 feet, or 22 yards, or 100 links. Equal to 20.1186 metres. Still used on rail infrastructure to indicate location
Chord	A railway line which connects two main lines.
Clearance (safety)	The amount of space needed between the rail track and infrastructure to ensure safe running of the railway.
Climate	Climate refers to the typical weather conditions experienced in a place over a period of time, conventionally expressed as average weather over a 30-year period.
Climate vulnerability	The degree to which the Scheme and its environmental receptors are susceptible to the impacts of climate change (beneficial and adverse).
Code of Construction Practice	The document that outlines how the Scheme will reduce or mitigate construction effects on the environment (Appendix 2-1).
Compensatory Flood Storage Areas	Scrapes or excavations within the Scheme boundary that are proposed to compensate for the Scheme encroaching on exiting floodplains.
Construction Access Route	Existing highway network and temporary haul routes that will be used by construction traffic connecting the Scheme with the wider area.
Construction dust	Solid particles that are suspended in air or have settled out onto a surface after having been suspended in air.
Construction Phase	The period in which construction of the Scheme takes place.
Construction Traffic Management Plan	A document which set outs the measures required during construction of the Scheme to reduce the impact on traffic and the local highway network.
Continuous monitoring station	An air quality monitoring station that houses analysers that continuously monitor the concentrations of air pollutants.
Controlled Water	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.
Coper	The top course of a brick or stone wall, usually rounded or sloping.

Term	Definition
Critical Load	Estimate of exposure to deposition of one or more pollutants, below which significant harmful effects on sensitive species do not occur, according to present knowledge.
Culvert	A structure that allows water to flow under the railway from one side to the other.
Cutting	Where material (generally rock or soil) is removed to make way for the railway below the surrounding ground level to avoid a change in level of the railway itself. A cutting is open at the top thereby differentiating it from a tunnel. It can be considered the opposite to an embankment.
Decarbonisation	Reducing, and ultimately eliminating, carbon dioxide emissions. It is essential in tackling climate change and a fundamental issue facing all industries.
Deemed planning permission	On making an order under the Transport and Works Act 1992, the Secretary of State may direct that planning permission shall be deemed to be granted, subject to such conditions (if any) as may be specified in the direction.
Department for Transport	The UK Government department responsible for the UK transport network and infrastructure.
Deposited dust	Dust that is no longer in the air and which has settled onto a surface. Sometimes called amenity dust or nuisance dust, with the term nuisance applied in the general sense rather than the specific legal definition
Deposition	The main pathway for removing pollutants from the atmosphere, by settling on land.
Design Manual for Road and Bridges	A suite of technical documents produced by Highways England that include guidance for environmental appraisal and assessment that are also used for non-highways schemes and as such are commonly used in EIA.
Designation (landscape)	Internationally or nationally valued landscape recognised on a formal statutory basis and through planning policy. Locally valued landscape recognised by local authorities through planning policy.
Diffuse pollution	The release of potential pollutants from a range of activities that, individually, may have no effect on the environment, but, at the scale of a catchment, can have a significant effect.
Diffusion Tube	A simple, cost effective device for measuring long-term air pollutant concentrations.
Distribution Network Operator	This relates to electrification and power supplies for stations.
Down main	For the purposes of this Scheme the Down main or Down line refers to the railway track that carries trains running from Huddersfield to Leeds (Dewsbury).
eDNA	An industry standard survey technique used to determine the presence or likely absence of GCN by testing water samples for traces of eDNA. Negative results indicate the likely absence of GCN. Positive results confirm the presence of GCN.
Effect	Outcome to an environmental feature from an impact. For example, killing / injury of bats and reducing the availability of breeding habitat as a result of the loss of a bat roost may lead to an adverse effect on the conservation status of the population concerned
Electromagnetic Field	Generated wherever electricity is produced, distributed and consumed including by railway electric traction systems, power lines and electrical and electronic equipment. EMFs may also be generated intentionally by radiocommunication systems.
Electromagnetic Interference	Unwanted electromagnetic (EM) disturbance that affects an electrical system due to magnetic fields, electric fields, electromagnetic induction or electromagnetic radiation emitted from an external source. EMI can prevent electrical or electronic equipment from functioning correctly.

Term	Definition
Embankment	Where the railway is raised up on a bank (generally soil or rock based) in relation to the surrounding ground level to avoid a change in level of the railway itself. Can be considered opposite to a cutting.
Embedded mitigation	Mitigation measures integrated into the design of the Scheme (i.e. the Scheme could not be delivered without them) and are intended to prevent, reduce and where possible offset any significant adverse impacts on the environment as well as measures such as compliance with statutory requirements. These measures are considered part of the Scheme when assessing the potential effects.
Embankment	Where the railway is raised up on a bank (generally soil or rock based) in relation to the surrounding ground level to avoid a change in level of the railway itself. Can be considered opposite to a cutting.
Emission	The direct or indirect release of substances, vibrations, heat or noise from individual or diffuse sources into air, water or onto land, e.g. pollution may be discharged into the atmosphere from a stack or vent
Emission Limit Value	Legal enforcement limit on the physical, chemical or biological characteristics of a point source of emission to water or air.
Engineering Line Reference	National system used in Britain to describe individual railway routes.
Environmental Health Officer	A local authority health professional responsible for carrying out measures for protecting public health.
Environmental Impact Assessment	The process by which the anticipated effects on the environment of a proposed development or Scheme are measures.
EIA Regulations	A document which sets out the procedures for identifying those projects which should be subject to an EIA. The full title of the document is The Environmental Impact Assessment (Miscellaneous Amendments Relating to Harbours, Highways and Transport) Regulations 2017.
Environmental Statement	The report setting out the process and findings of an Environmental Impact Assessment.
Façade	Building or structure face
Flood Zone	Defined by the EA based on the likelihood of an area flooding, with Flood Zone 1 areas least likely to flood and Flood Zone 3 areas more likely to flood
Floodplain	The area of land adjacent to a stream or river which is subject to flooding when river levels are high.
Footpath Diversion	Footpaths, bridleways and restricted byways may be diverted by order of a council, under section 119(1) of The Highways Act 1980, if it appears to them to be expedient to do so in the interests of either the owner, lessee or occupier of land crossed by the way or of the public.
Free-field	Position located at least 3.5m from a reflective surface other than the ground.
Greenhouse Gas	An atmospheric gas such as carbon dioxide, methane, chlorofluorocarbon, nitrous oxide, ozone or water vapour that slows the passage of re-radiated heat through the Earth's atmosphere.
Ground Investigation	Intrusive ground investigation works involving the drilling of exploratory hole locations and the recovery of soil samples which has been undertaken across the Scheme
Groundwater	Water situated within the ground e.g. within soil or aquifers
Habitat	A place where an organism (e.g. human, animal, plant, micro-organism) or population of organisms live, characterised by its surroundings
Habitat of Principal Importance	These habitats in England are published in a list by the Secretary of State under the Natural Environment and Rural Communities (NERC) Act, 2006, Section 41.
Heavy Goods Vehicle	A truck that when laden has a total weight of more than 3.5tonnes

Term	Definition
High sensitivity Receptor (dust)	A land use at which users can reasonably expect the enjoyment of a high level of amenity; or the appearance, aesthetics or value of the property would be diminished by soiling; and the people or property would reasonably be expected to be present continuously, or at least regularly for extended periods, as part of the normal pattern of use of the land.
Impact	Actions resulting in changes to an environmental feature. For example, demolition activities leading to the removal of a building used as a bat roost.
Important Ecological Feature	The Chartered Institute for Ecology and Environmental Management (CIEEM) define an important ecological feature as one with sufficient nature conservation importance to warrant a detailed assessment in an Ecological Impact Assessment (EcIA)
Institute of Air Quality Management (IAQM)	A professional body for air quality professionals, that publishes guidance.
$L_{Aeq,15min}$	LAeq,15min is the 'equivalent continuous sound level' over a 15-minute period. This is equal to the average sound energy experienced during the 15-minute period, smoothing out the natural fluctuations in the sound level over time. This is sometimes referred to as the 'ambient sound level'.
$L_{Amax,15min}$	LAmax,15min is the maximum sound level that is experienced during the 15-minute period.
$L_{A10,15min}$	LA10,15min is the sound level that is exceeded for 10% of the 15-minute measurement period (i.e. the noisiest 90 seconds in a 15-minute period are louder than this level).
$L_{A90,15min}$	LA90,15min is the sound level that is exceeded for 90% of the 15-minute measurement period (i.e. the quietest 90 seconds in a 15-minute period are quieter than this level). This is sometimes referred to as the 'background sound level'.
$L_{Aeq,T}$	The value of the sound pressure level of a continuous steady noise that, a measurement interval of time (t), has the same mean square sound pressure as the sound under consideration whose level varies with time.
Lake	Standing water bodies greater than 2 ha (20,000m^2) in area.
Landscape Character Area	Discrete geographical areas having their own individual character and identify.
Land take	The acquisition of land requirement for the Scheme.
Light Duty Vehicle	This comprises vehicles with a weight less than 3.5 tonnes (gross weight). Includes cars and vans.
Link	Represent sections of road that have the same properties (speed, capacity etc.) along the full length of that section. A road may be represented by one or many sequential model links, depending on whether the properties of the road change at points (modelled notionally as network 'nodes') along it.
Listed Building Consent	Required for all works of demolition, alteration or extension to a listed building that affect its character as a building of special architectural or historic interest.
L_{night}	Equivalent A-weighted outdoor sound pressure level associated with a particular type of noise during night-time (at least 8 hours), calculated over a period of a year.
Local Authority	An administrative body in local government; for the Scheme this is Kirklees Council.
Local Development Framework	A spatial planning strategy introduced by the Planning and Compulsory Purchase Act 2004.
Local Landscape Area	Geographical areas of distinctive quality at a District level. They make special contributions to the appearance and character of landscape areas.
Local Nature Reserve	Statutory designations with wildlife or geological features that are of interest locally under Section 21 of the National Parks and Access to the Countryside

Term	Definition
	Act, 1949 (amended by schedule 11 of the Natural Environment and Rural Communities Act 2006).
Local Plans	Documents prepared by a Local Authority, in accordance with National planning policy, which set out a vision and a framework for the future development of the area, addressing needs and opportunities in relation to housing, the economy, community facilities and infrastructure – as well as providing a basis for safeguarding the environment, adapting to climate change and securing good design. As such, Local Plans are also a critical tool in guiding decisions about development proposals.
Local Wildlife Site	Wildlife-rich site selected for local nature conservation interest or value. A non-statutory designation, defined in local and structure plans under the Town and Country Planning system which may be a material consideration in planning.
Low Sensitivity Receptor (dust)	A land use at which the enjoyment of amenity would not reasonably be expected; or property would not reasonably be expected to be diminished in appearance, aesthetics or value by soiling; or there is transient exposure, where the people or property would reasonably be expected to be present only for limited periods of time as part of the normal pattern of use of the land.
Made Ground	An area where the pre-existing (natural or artificial) land surface is raised by artificial deposits. The purpose of the Made Ground is unspecified.
Magnitude	Refers to the size of an impact (e.g. high, medium, low or no change).
Main River	A main river is a stator watercourse which has been designated by Defra. They typically include larger streams and rivers.
Mitigation	Measures identified to reduce potential environmental impacts and effects arising from the construction and or operation of the Scheme.
Maintenance	Maintenance can comprise inspections, repair, adjustments or alterations, removal, refurbishments, reconstruction, replacements and improvements
Manual Traffic Count	Means of determining traffic levels.
Materials Management Plan	A mechanism by which a development can seek to reuse excavated materials without the need for an Environmental Permit or exemption should a series of conditions be met.
Materials Management Strategy	A strategy to identify materials that will be generated during the planned Construction, Demolition and Excavation works, how these materials will be managed and their potential reuse within the Scheme. It is the intention that the Strategy will be updated and developed into a Materials Management Plan (MMP).
MDL	Engineer's line reference for the Manchester, Dewsbury & Leeds railway line, used to identify individual structures and mileages.
Medium Sensitivity Receptor (dust)	A receptor at which users would expect to enjoy a reasonable level of amenity, but would not reasonably expect to enjoy the same level of amenity as in their home; or the appearance, aesthetics or value of their property could be diminished by soiling; or the people or property wouldn't reasonably be expected to be present here continuously or regularly for extended periods as part of the normal pattern of use of the land.
Mitigation	Measures identified to reduce potential environmental impacts and effects arising from the construction or operation of the Scheme
Mitigation hierarchy	The mitigation hierarchy sets out the order in which mitigation actions should be considered, from most desirable to least desirable, to address likely effects identified during an EIA. Avoid, minimise or reduce and restore or compensate.
MVL	Engineer's line reference for the Manchester Victoria to Leeds railway line, used to identify individual structures and mileages.

Term	Definition
MVN	Engineer's line reference for the Manchester Victoria to Normanton railway line, used to identify individual structures and mileages.
National Character Area	Subdivisions of England that are based on a combination of landscape, biodiversity, geodiversity and economic activity. These broad divisions form the basic units of cohesive countryside character, giving each a distinct 'sense of place'.
National Vegetation Classification	A hierarchal system designed to classify existing vegetation composition, and vegetation structure occurring in a specific place.
National Vegetation Classification Area	Distinct areas of land screening in for NVC survey.
Navigation Authority	A company or statutory body which is concerned with the management of a navigable canal or river (e.g. Canal & River Trust).
Nitrogen Oxide (NO)	A pollutant discharged by combustion engines.
Noise Important Areas	Areas where the top 1% of the worst affected people from road or railway noise in the UK were located according to the results of Defra strategic noise mapping
Non-statutory designated site	Nature conservation sites with local policy protection (e.g. Local Wildlife Site)
Nuisance Management Plan	A plan that describes how dust emissions will be prevented or minimised on site to avoid impacts beyond the Scheme boundary, including monitoring regime and record of complaints.
Operation or Operational Phase	The period when the Scheme is in operation. Day to day functioning of the Scheme following the completion of construction.
Ordinary Watercourse	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.
Overbridge	An overbridge is defined as a structure which carries a highway, footpath or other amenity over the railway.
Overhead Line Equipment	Overhead line electrification equipment, which supplies electric power to the trains.
Pantograph	Device fitted to the top of the train that collects electric current from the overhead contact wire to power the train.
Parapet	A wall at the top of a building or structure, such as a bridge.
Particulate Matter	Airborne particulate matter with a diameter less than either 10 microns (PM_{10}) or 2.5 microns ($PM_{2.5}$) which have the potential to be inhaled and cause serious health problems
Pathway	The route by which contamination moves from a source to a given receptor.
PEH	Engineer's line reference for the Penistone and Huddersfield railway line, used to identify individual structures and mileages.
Phase 1 Habitat Survey	Standard technique for environmental audit based on habitat type.
Point Source	Source of pollution that is emitted from a single geographical point such as a stack (as opposed to fugitive emissions).
Pollutant	Substances which, when present in the atmosphere under certain conditions and at certain concentrations, may have an adverse effect on human, animal, plant or microbial life or to property or which may interfere with the enjoyment of life or property.
Pond	Standing water bodies less than 2 ha (20,000m^2) in area.
Possession	A period of time when one or more tracks are closed for maintenance or repair. For the during of work a person in charge of possession has control of the line. When work is complete the possession is relinquished and control of the line handed back to the signaller.

Term	Definition
Power Supply Point	Provides power to overhead contact lines and other infrastructure (e.g. signalling).
Principal Supply Unit	Infrastructure takes power from overhead 132kv power lines and transforms it down to the power requirements of the railway.
Priority Habitat	Semi-natural habitat identified as being the most threatened and requiring conservation action under the UK Biodiversity Action Plan (UK BAP).
TRU Programme	Series of projects to improve the Transpennine railway between Manchester, Huddersfield, Leeds and York and improve connections between key towns and cities across the north of England.
Public Right of Way	Paths on which the public have legally protected rights to pass.
Rail	Linear steel support for train wheels. Two rails secured to sleepers make up the track.
Railway	General term referring to the rail transport system as a whole and the corridor in which it sits.
Ramsar Site	A designation for wetlands of international importance
Reasonably Foreseeable Future Projects	Projects that have not yet been constructed but which should be considered in combination with the Scheme to assess potential cumulative effects. Examples include major developments within proximity to the Scheme that have planning permission or strategic highways schemes.
Receptor	An identified aspect of the environment – e.g. a resident, protected species, heritage asset, controlled water – that may be affects by emissions during demolition, construction or operation. Human receptors include locations where people spend time and where property may be impacted. Ecological receptors are habitats that might be sensitive to changes in air quality
Re-laying	The removal of old railway materials (such as rails, sleepers or ballast) and replacement with new materials for the purpose of maintenance or upgrade
River Basin Management Plan	A plan that sets out measures to improve water in rivers, lakes, estuaries, coasts and groundwater, within a designated river basin district as a requirement of the Water Framework Directive.
Rock anchors	A stability and strengthening measure. For this Scheme, it refers to metal bars which will be drilled into the surrounding rock.
Rolling Stock	Anything with wheels on it which can run on the track including locomotives, carriages, goods wagons, and maintenance vehicles.
Route Section	For reporting purposes, the Scheme has been split into six distinct areas (Route Sections) based on geography.
Satellite Compound	Smaller compound from which construction for that section is managed, comprising small offices and welfare facilities, areas for the storage of plant and materials and some material processing
SATURN	A modelling tool to allow assessment of congestion on urban road networks by modelling the impact of queues that form at a particular junction based on capacity.
Scheme	The works authorised under the Order and permitted development rights which are referred to in this ES.
Scheme Area	The footprint of the Scheme includes the physical extent of the permanent works, together with land required temporarily to construct the permanent works.
Scheme boundary	A boundary that delineates the Scheme Area and is represented by the red line boundary on plans. This is also the same as the Order Boundary.
Scheme Route	Comprises 14km of track and four stations at Huddersfield, Deighton, Mirfield and Ravensthorpe
Scoping Opinion	The formal opinion of the relevant statutory stakeholders on the information to be supplied in the Environmental Statement.

Term	Definition
Scoping Report (also Environmental Scoping Report)	A formal request for a Scoping Opinion.
Secondary A Aquifer	Aquifers which have permeable layers capable of supporting water supplies at a local rather than strategic scale and in some cases form an important source of baseflow to rivers.
Semi-improved grassland	Semi-improved grassland is not a formal Habitat of Principal Importance type but this is the name used in the Natural England data GIS set which was mainly compiled from desk study sources. The level of confidence attributed to areas of mapped semi-improved grasslands is considered by Natural England to be 'low' meaning that many may not be of Habitat of Principal Importance quality.
Semi-natural woodland	A habitat that occurs prominently in the lowlands of England, giving texture and pattern to the countryside and providing interest in what are otherwise often intensively managed areas. These characteristic components of the English countryside are especially significant as very few similar landscapes occur outside Britain.
Significant effects	This applies when an effect is large enough to be important or affect a situation to a noticeable degree, as identified in the EIA regulations. Professional judgement is necessary to determine whether an effect is significant based on the evidence presented.
Site of Special Scientific Interest	A geological or biological conservation designation denoting a protected area in the UK.
Slew	The moving sideways (horizontally) of a railway track.
Soil nailing	A ground stabilisation technique that can be used on either natural or excavated slopes. Grouted steel nails are installed horizontally to reinforce soils and create a gravity retaining wall.
Special Protection Area	A designated area for birds under the European Union Directive on Conservation of Wild Birds.
Source Protection Zones	For groundwater sources such as wells, boreholes and springs used for public drinking water supply. These zones show the risk of contamination from any activities that might cause pollution in the area. The closer the activity, the greater the risk.
Spandrel	The roughly triangular area between the outer curve of an arch a horizontal line above it, e.g. an arch carrying a bridge deck.
Special Area of Conservation	Area of protected habitats and species as defined in the European Union's Habitats Directive.
Stakeholders	Persons or groups who are directly or indirectly affected by a Scheme and/or an offset, as well as those who are interested in the Scheme and have the ability to influence its outcome, for good or bad. They include persons or groups who hold rights over land and resources in the area of the Scheme. Stakeholders can include, but are not limited to, indigenous peoples, local communities, non-governmental organisations and members of scientific bodies such as university departments and research institutes, local and central government, customers, shareholders, management, employees and suppliers.
Statutory designated sites	Nature conservation sites with legal protection (includes Ramsar sites, SPA, SAC, SSSI).
Strategic Compound	These are the sites from where the main construction and project management is undertaken. In general, they will provide office space, welfare facilities and processing and store materials.
Study Area	The identified spatial scope over which an assessment has been undertaken. The study area is topic specific and varies by environmental topic chapter.
Surface water	Water situated about ground level e.g. within rivers, ponds and lakes

Term	Definition
Switches and Crossing	A mechanical installation enabling trains to be guided from one railway track to another, such as at a junction or at a siding.
Temporary Highway Works	Highway works proposed on the Construction Access Routes to reduce the impact of construction traffic on the public highway and improve suitability for construction vehicles. The proposed works comprise of passing places and junction works
The Order	The TWAO authorising the Scheme: The Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order.
Townscape Character Area	Discrete geographical areas having their own individual character and identify.
Track	Rail system consisting of two rails, secured on sleepers, on which trains run.
Trackout	The transport of dust and dirt from the construction/demolition site onto the public road network, where it may be deposited and then re-suspended by vehicles using the network. This arises when vehicles leave the construction/demolition site with dust materials, which may spill onto the road, and/or when vehicles transfer dust and dirt onto the road having travelled over muddy ground on site.
Transport and Works Act Order	The mechanism by which authorisation is given for the construction and operation of certain transport systems, such as railways. An order gives the promoter the necessary powers to put such a Scheme into practice.
TWAO Application	An application for a Transport and Works Act Order.
Underbridge	A structure which carries the railway over a highway, footpath or other amenity.
Unproductive strata	These are rock layers or drift deposits with low permeability which have negligible significance for water supply or river base flow (as defined by the Environmental Agency).
Up main	For the purposes of this Scheme the Up main or Up line refers to the railway track that carries trains running from Leeds (Dewsbury) to Huddersfield.
Verification	Process of verifying the robustness of modelled data by comparing with empirical measurements.
Zone of Influence	The areas/resources that may be affected by the biophysical changes caused by activities associated with the Scheme.
Zone of Theoretical Visibility	A map produced to illustrate the theoretical visibility of the Scheme. It illustrates the Scheme's visibility viewed from a height of 1.8m above ground level to be representative of approximate adult eye height.