# Bramford to Tivinstead 

 Reinforcement
## Volume 1: Application Information

## Document 1.6: Glossary and Acronyms

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## Acronyms

| Acronym | Full Reference |
| :---: | :---: |
| ~ | Approximately (note 'c.' also used) |
| £m | £Million |
| < | Less than |
| > | Greater than |
| $\mu \mathrm{g}$ | Microgram |
| $\mu \mathrm{g} / \mathrm{m}^{3}$ | Micrograms per cubic metre |
| 1 GW | 1000 MW |
| 1 GWh | 1000 MWh |
| 1 kW | 1000 W |
| 1 MW | 1000 kW |
| 1 MWh | 1000 kWh |
| 1 TWh | 1000 GWh |
| 85\%ile | $85^{\text {th }}$ percentile speed - the speed below which $85 \%$ of traffic travels |
| AAAC | All Aluminium Alloy Conductor |
| AADT | Annual Average Daily Traffic |
| AAR | Annual Average Rainfall |
| AAWT | Annual Average Weekday Traffic Flow |
| AC/DC | Alternating Current/Direct Current |
| ACS | Average Cold Spell |
| ACSR | Aluminium Steel Reinforcement Conductor |
| AD | Anno Domini |
| AEP | Annual Exceedance Probability |
| AFS | Archaeological Framework Strategy |
| AGI | Above Ground Installation |
| AGL | Above Ground Level |
| AGNIR | Advisory Group on Non-lonising Radiation |
| AIA | Arboricultural Impact Assessment |
| AIL | Abnormal indivisible load |
| AIM | Aerial Investigation and Mapping |
| AIMD | Active Implantable Medical Device |


| Acronym | Full Reference |
| :---: | :---: |
| AIS | Air Insulated Switchgear |
| ALC | Agricultural Land Classification |
| ANGS | Accessible Natural Green Space |
| AOD | Above Ordnance Datum |
| AONB | Area of Outstanding Natural Beauty |
| APFP Regulations | Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended) |
| AQMA | Air Quality Management Area |
| ARN | Affected Road Network |
| ASNW | Ancient Semi Natural Woodland |
| AT0 | Accumulated temperature above $0^{\circ}$ |
| ATC | Automatic Traffic Counter |
| ATI | Ancient Tree Inventory |
| ATT | Archaeological Trial Trenching |
| AWI | Ancient Woodland Inventory |
| BBS | Breeding Bird Survey |
| BCT | Bat Conservation Trust |
| BEIS | Department for Business, Energy and Industrial Strategy (now the Department for Energy Security and Net Zero) |
| BFI | Base flow Index |
| bgl | Below ground level |
| BGS | British Geological Survey |
| BMV | Best and Most Versatile |
| bn | Billion |
| BNG | Biodiversity Net Gain |
| BNL | Basic Noise Level - A standard metric of the noise level generated by road traffic on a carriageway. Defined as the sound level exceeded for $10 \%$ of the time at a distance of 10 m from the carriageway edge between the hours of 06:00 and 23:00 during weekdays. |
| BoCC | Birds of Conservation Concern |
| BoR | Book of Reference, as required by The Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009 |
| BP | Before Present |
| BPM | Best Practicable Means |
| BS | British Standard |


| Acronym | Full Reference |
| :---: | :---: |
| BSBI | Botanical Society of Britain and Ireland |
| BTELANE | Braintree Protected Lane |
| BTHK | Bat Tree Habitat Key |
| BTO | British Trust of Ornithology |
| C | Century |
| CAA | Civil Aviation Authority |
| CAMS | Catchment Abstraction Management Strategy |
| CB | Confirmed Breeder |
| CBA | Cost Benefit Analysis |
| CBH | Circumference Breast Height |
| CBR | California Bearing Ration |
| CCC | Climate Change Committee |
| CCG | Clinical Commission Group |
| CCGT | Combined Cycle Gas Turbine |
| CCTV | Closed Circuit Television |
| CDM Regulations | Construction (Design and Management) Regulations 2015 |
| CEA | Cumulative effects assessment |
| CEH | Centre for Ecology and Hydrology |
| CEMFWR | Control of Electromagnetic Fields at Work Regulations |
| CEMP | Construction Environmental Management Plan |
| CIEEM | Chartered Institute of Ecology and Environmental Management |
| CIfA | Chartered Institute for Archaeologists |
| CIRIA | Construction Industry Research and Information Association |
| CIT | Carbon Interface Tool |
| CLA | Country Land and Business Association |
| CLR11 | Contaminated Land Report 11 |
| CNI | Critical National Infrastructure |
| CO | Carbon monoxide |
| $\mathrm{CO}_{2}$ | Carbon Dioxide |
| CoCP | Code of Construction Practice |
| CoPA | Control of Pollution Act 1974 |
| COR | Connection Options Report |


| Acronym | Full Reference |
| :---: | :---: |
| COSHH | Control of Substances Hazardous to Health Regulations 2002 |
| COVID-19 | Coronavirus |
| CR | Critically Endangered |
| CRCE | Centre For Radiation, Chemical and Environmental Hazards |
| CRTN | Calculation of Road Traffic Noise |
| CSC | Current Source Conductor |
| CSE | Cable Sealing End |
| CSEPP | Cable Sealing End Pylon Platform |
| CSM | Conceptual Site Model |
| CSZ | Core Sustenance Zone |
| CTMP | Construction Traffic Management Plan |
| CWS | County Wildlife Site |
| DAFOR | Qualitative measurement of vegetation cover: $\mathrm{D}=$ Dominant; $\mathrm{A}=\mathrm{Abundant;} \mathrm{~F}=$ Frequent; $\mathrm{O}=$ Occasional; and $\mathrm{R}=$ Rare |
| DAP | Demolition Access Point |
| DAS | Design and Access Statement |
| dB | Decibel - unit for measuring noise |
| DBH | Diameter at Breast Height |
| DC | Direct Current |
| DCLG | Department of Communities and Local Government (now DLHUC) |
| DCO | Development Consent Order |
| DECC | Department of Energy and Climate Change (now the Department for Energy Security and Net Zero) |
| Defra | Department for Environment, Food and Rural Affairs |
| DfT | Department for Transport |
| DLHUC | Department for Levelling Up, Housing and Communities |
| DLL | District Level Licence |
| DMRB | Design Manual for Roads and Bridges |
| DNA | Deoxyribonucleic Acid - used for confirmation of bat species |
| DNO | Distribution Network Operator (e.g. UK Power Networks) |
| DOMIN | Quantitative measurement of vegetation cover |
| DPD | Development Plan Document |
| DSM | Digital Surface Model |


| Acronym | Full Reference |
| :---: | :---: |
| DTM | Digital Terrain Model |
| EA | Environment Agency |
| EAP | Environmental Access Point |
| EC | European Commission |
| EclA | Ecological Impact Assessment |
| EDF | EDF Energy |
| EEG | Electroencephalogram |
| EFC | Essex Field Club |
| EHER | Essex Historic Environment Record |
| EHO | Environment Health Officer |
| EIA | Environmental Impact Assessment |
| ELF | Extremely Low Frequency |
| ELMS | Environmental Land Management Schemes |
| EMC | Electromagnetic Compatibility |
| EMF | Electric and Magnetic Field |
| EN | Endangered |
| EN-1 | Overarching National Policy Statement for Energy |
| EN-5 | National Policy Statement for Electricity Networks Infrastructure |
| ENSG | Electricity Networks Strategy Group |
| EnvCow | Environmental Clerk of Works |
| EPS | European Protected Species |
| ES | Environmental Statement |
| ESDAL | Electronic Service Delivery for Abnormal Load |
| ETYS | Electricity Ten Year Statement |
| EU | European Union |
| EW | Extinct in the Wild |
| EWBS | English Wintering Bird Survey |
| EWC | European Waste Catalogue |
| EWT | Essex Wildlife Trust |
| FCD | Field Capacity Days |
| FCS | Favourable Conservation Status |
| FEH | Flood Estimation Handbook |


| Acronym | Full Reference |
| :---: | :---: |
| FES | Future Energy Scenarios |
| FGL | Finished Ground Level |
| FLT | Full line tension gantry |
| FRA | Flood Risk Assessment |
| FRAP | Flood Risk Activity Permit |
| FSC | Forest Stewardship Council |
| FSL | Finished Surface Level |
| GB | Great Britain |
| GCN | Great Crested Newt |
| GCR | Geological Conservation Review Site |
| GDPR | General Data Protection Regulation |
| GEP | Good Ecological Potential |
| GHG | Greenhouse Gas |
| GIL | Gas Insulated Line |
| GIS | Geographical Information System or Gas Insulated Switchgear |
| GLVIA3 | Guidelines for Landscape and Visual Assessment, Version 3 |
| GNSS | Global Navigation Satellite System |
| GPS | Global Positioning System |
| GQA | General Quality Assessment |
| GS | Geophysical Survey |
| GSP | Grid Supply Point (substation) |
| GVD | General Vesting Declaration |
| GW | Gigawatt (1,000 million Watts) |
| GWDTE | Groundwater dependent terrestrial ecosystem |
| H\&S | Health and Safety |
| ha | Hectare |
| HDD | Horizontal Directional Drilling |
| HDV | Heavy Duty Vehicle (>3.5 tonnes) |
| HER | Historic Environment Record |
| HGV | Heavy Goods Vehicle |
| HLC | Historic Landscape Characterisation |
| HLS | Higher Level Stewardship |


| Acronym | Full Reference |
| :---: | :---: |
| HLT | Historic Landscape Type |
| HND | Holistic Network Design |
| HPA | Health Protection Agency |
| HPI | Habitats of Principal Importance |
| HRA | Habitats Regulations Assessment |
| HSE | Health and Safety Executive |
| HSI | Habitat Suitability Index |
| HSM | Habitat Suitability Modelling |
| HSR | Habitats and Species Regulations |
| HV | High Voltage |
| HVAC | High Voltage Alternating Current |
| HVDC | High Voltage Direct Current |
| Hz | Hertz |
| IAP | Important Arable Plant |
| IAPA | Important Arable Plant Areas |
| IAQM | Institute of Air Quality Management |
| IARC | International Agency for Research on Cancer |
| ICD | Implanted Cardiac Defibrillator |
| ICM | Interim Connect and Manage |
| ICNIRP | International Commission on Non-Ionising Radiation Protection |
| IDB | Internal Drainage Board |
| IEA | Institute of Environmental Assessment |
| IEMA | Institute of Environmental Management and Assessment |
| IET | Institution of Engineering and Technology |
| IfA | Institute for Archaeologists |
| IMD | Index of Multiple Deprivation |
| INNS | Invasive and non-native species |
| IPC | Infrastructure Planning Commission (functions now performed by the Planning Inspectorate) |
| IPCC | Intergovernmental Panel on Climate Change |
| IROPI | Imperative Reasons of Overriding Public Interest |
| IRZ | Impact Risk Zone |
| ISIS | Invertebrate Species-habitat Information System |


| Acronym | Full Reference |
| :---: | :---: |
| ISO | A measure of how sensitive photographic film is to light. Digital cameras are able to be set at different sensitivities providing an additional means of controlling exposure. |
| IUCN | International Union FOR THE Conservation of Nature |
| JNCC | Joint Nature Conservation Committee |
| kA | Kiloampere (1000 Amperes) |
| km | Kilometre |
| kV | Kilovolt (1,000 Volts) |
| kV/m | Kilovolt per metre |
| kVA | Kilo Volt Amps |
| kW | Kilowatt |
| kWh | Kilowatt hour |
| LAA | Local Aggregate Assessment |
| LAQM | Local Air Quality Management |
| LBAP | Local Biodiversity Action Plan |
| LC | Least Concern |
| LCA | Landscape Character Area |
| LCRM | Land Contamination Risk Management |
| LDC | Land Drainage Consent |
| LDS | Local Development Scheme |
| LED | Light-emitting Diode |
| LEMP | Landscape and Ecological Management Plan |
| Leq | Equivalent Continuous Sound Level |
| LGV | Light Goods Vehicle |
| LHA | Local Highway Authority |
| LI | Landscape Institute |
| LiDAR | Light Detection and Ranging |
| LIQ | Land Interest Questionnaire |
| LIR | Local Impact Report |
| LLFA | Lead Local Flood Authority |
| LNR | Local Nature Reserve |
| LOAEL | Lowest Observed Adverse Effect Level |
| LoD | Limits of Deviation |
| LONI | Letter of No Impediment |


| Acronym | Full Reference |
| :---: | :---: |
| LoWS | Local Wildlife Site |
| LPA | Local Planning Authority |
| LPP | Local Planning Policy |
| LQA | Land Quality Assessment |
| LRN | Local Road Network |
| LRS | National Grid's Land Rights Strategy |
| LSE | Likely Significant Effect |
| LSOA | Lower-layer Super Output Area |
| LTP | Local Transport Plan |
| LURB | Levelling Up and Regeneration Bill |
| LVA | Landscape and Visual Appraisal |
| LVIA | Landscape and Visual Impact Assessment |
| m | Metre/Million |
| $\mathrm{m}^{3}$ | Cubic Metre |
| MAFF | Ministry for Agriculture, Fisheries and Food |
| MAGIC | Multi-Agency Geographic Information for the Countryside |
| MAHP | Major Accident Hazard Pipeline |
| MCA | Mineral Consultation Areas |
| MCC | Manual Classified Count |
| MEX | Monuments of Essex |
| MF | Magnetic Field |
| MHCLG | Ministry of Housing, Communities and Local Government |
| MHRA | Medicines and Healthcare Products Regulatory Agency |
| MI | Mega litre |
| MI/d | Million litres per day |
| mm | Millimetres |
| mm/s | Millimetres per second (a metric of vibration from construction activities) |
| MoRPh | Modular River Physical [Survey] |
| MP | Member of Parliament |
| MPA | Mineral Planning Authority |
| MRA | Mineral Resource Assessment |
| ms | Millisecond (one thousandth of a second). |


| Acronym | Full Reference |
| :--- | :--- |
| MSA | Mineral Safeguarding Area |
| MSF | Monuments of Suffolk |
| MVA | Megavolt Ampere |
| MW | Materialt (1 million Watts) Waste Management Plan |
| MWMP | Net Additional Expenditure |
| NAE | National Air Traffic Service |
| NATS | Non-breeding |
| NB | National Biodiversity Network |
| NBN | National Character Area |
| NCA | National Cycle Network |
| NCN | Natural Environment and Rural Communities |
| NE | Nats (En Route) Public Limited Company |
| NERC | National Electricity Transmission System |
| NERL | National Electricity Transmission System Security and Quality of Supply Standard |
| NETS | National Grid Energy System Operator |
| NETS SQSS | National Policy Statement |
| NGESO | National Grid Electricity Transmission |
| NGET | National Grid Reference |
| NGR | National Grid Ventures |
| NGV | Natrogen dioxide: Pollution associated with vehicle traffic |
| NHLE | National Heritage List for England |
| NIA | Noise Important Area |
| NLS | National Library of Scotland |
| NNR | NPP |


| Acronym | Full Reference |
| :---: | :---: |
| NR | Nationally Rare |
| NRPB | National Radiological Protection Board |
| NRSWA | New Roads and Street Works Act |
| NS | Nationally Scarce |
| NSIP | Nationally Significant Infrastructure Project |
| NSR | Noise and vibration sensitive receptor |
| NSRI | National Soil Research Institute |
| NT | Near Threatened |
| NTS | Non-Technical Summary |
| NVC | National Vegetation Classification |
| OCGT | Open Cycle Gas Turbine |
| OD | Ordnance Datum |
| OGV | Ordinary Goods Vehicle |
| OHL | Overhead Line |
| ONS | Office for National Statistics |
| OPGW | Optical Ground Wire |
| OS | Ordnance Survey |
| OTNR | Offshore Transmission Network Review |
| OUV | Outstanding Universal Value |
| Ows | Outline Written Scheme of Investigation |
| PA | Planning Act |
| PAWS | Plantation on Ancient Woodland Site |
| PB | Probable Breeding |
| PBDE | Polybrominated Diphenyl Ethers |
| PC | Parish Council |
| PCZ | Primary Consultation Zone |
| PDOR | Project Development Options Report |
| PEI Report | Preliminary Environmental Information Report |
| PHE | Public Health England (now known as the UK Health Security Agency) |
| PIC | Personal Injury Collision |
| PIL | Person with an Interest in Land |
| PINS | Planning Inspectorate |


| Acronym | Full Reference |
| :---: | :---: |
| PIR | Passive Infrared Sensor |
| PM ${ }_{10}$ | Particulate matter with an aerodynamic diameter equal to or less than $10 \mu \mathrm{~m}$. |
| PM ${ }_{2.5}$ | Particulate matter with an aerodynamic diameter equal to or less than $2.5 \mu \mathrm{~m}$. |
| PoAW | Potential Ancient Woodland |
| PoAWS | Potential Ancient Woodland Site |
| PPA | Planning Performance Agreement |
| PPE | Personal Protective Equipment |
| PPG | Planning Practice Guidance |
| PPV | Peak Particle Velocity (a metric of vibration from construction activities) |
| PRA | Preliminary Risk Assessment |
| PRF | Potential Roost Feature (Bat) |
| PRoW | Public Right of Way |
| PS | Possible Breeding |
| PSD | Particle Size Distribution |
| psi | Pounds per Square Inch |
| PWS | Private Water Supplies |
| QP | Qualified Person |
| RBD | River Basin District |
| RBMP | River Basin Management Plan |
| RCN | Regional Cycle Network |
| RCS | Route Corridor Study |
| RDB | Red Data Book |
| RF | Radio Frequency |
| RFC | Ratio of highway flow to capacity |
| RFI | Radio Frequency Interference |
| RHA | Relevant Highway Authority |
| RIGS | Regionally Important Geological Site |
| RIS3 | Road Investment Strategy 3 |
| RMS | Root Mean Square |
| RNR | Roadside Nature Reserves |
| RPA | Root Protection Area |
| rpm | Revolutions per Minute |


| Acronym | Full Reference |
| :---: | :---: |
| RSPB | Royal Society for the Protection of Birds |
| RTPI | Royal Town Planning Institute |
| s | Second |
| SAAR | Standard Average Annual Rainfall |
| SAC | Special Area of Conservation |
| SAGE | Stakeholder Advisory Group on ELF EMFs |
| SBIS | Suffolk Biodiversity Information Centre |
| SC | Statutory Consultation |
| SCC | Suffolk County Council |
| SCENIHR | Scientific Committee on Emerging and Newly Identified Health Risks |
| SCI | Site of Community Importance |
| SCL | Special Category Land |
| SCZ | Secondary Consultation Zone |
| SERF | South East Research Framework |
| $\mathrm{SF}_{6}$ | Sulphur Hexafluoride |
| SFRA | Strategic Flood Risk Assessment |
| SGT | Super Grid Transformer |
| SHER | Suffolk Historic Environment Record |
| SIC | Standard Industrial Classifications (Standard Industry Code) |
| SINCs | Sites of Importance for Nature Conservation |
| SLA | Special Landscape Area |
| SLM | Sound Level Meter |
| SM | Scheduled Monument |
| SME | Small/Medium Enterprises |
| SNCI | Site of Nature Conservation Interest |
| SNH | Scottish Natural Heritage (now NatureScot) |
| SO | System Operator (e.g. National Grid Electricity System Operator) |
| $\mathrm{SO}_{2}$ | Sulphur dioxide |
| SOA | Super Output Area |
| SOAEL | Significant Observed Adverse Effect Level |
| SoCC | Statement of Community Consultation in accordance with Section 47 of the Planning Act 2008 |
| SoCG | Statement of Common Ground |


| Acronym | Full Reference |
| :---: | :---: |
| SoR | Statement of Reasons |
| SOR | Strategic Options Report |
| SoS | Secretary of State |
| SPA | Special Protection Area |
| SPG | Supplementary Planning Guidance |
| SPI | Species of Principal Importance |
| SPR | Scottish Power Renewables |
| SPRHOST | Standard Percentage Run-off Hydrology of Soil Types |
| SPZ | Source Protection Zone |
| SQSS | Security and Quality of Supply Standards |
| SRN | Strategic Road Network |
| SSSI | Site of Special Scientific Interest |
| STW | Sewage Treatment Works |
| SuDS | Sustainable Drainage Systems |
| SVPA | Stour Valley Project Area |
| SWT | Suffolk Wildlife Trust |
| T | Tonnes |
| TA | Transport Assessment |
| TAG | Transport Analysis Guidance |
| TCF | Technical Construction File |
| TCPA | Town and Country Planning Act 1990 |
| TEMPro | Trip End Model Presentation Program |
| TEP | The Environment Partnership |
| TGN | Technical Guidance Note |
| TN | Target Note |
| TPO | Tree Preservation Order |
| TRANSYT | Traffic Network Study Tool |
| TRO | Traffic Regulation Order |
| TTM | Temporary Traffic Management |
| UK | United Kingdom |
| UK HSA | United Kingdom Heath Security Agency |
| UK-AIR | UK Air Information Resource |


| Acronym | Full Reference |
| :--- | :--- |
| UKCP09 | UK Climate Projections 2009 |
| UKCP18 | UK Climate Projections 2018 |
| UKHab | UK Habitat Classification Survey (vegetation survey method) |
| UKPN | UK Power Networks |
| UKTAG | UK Technical Advisory Group |
| UNFCCC | United Framework on Climate Change unit of electrical voltage, symbol V |
| V | Volts per metre |
| V/m | Volt Amperes reactive |
| VAr | Visual Impact Provision |
| VIP | Volatile Organic Compounds |
| VOC | Vantage Point (for bird surveys) |
| VP | Waste Acceptance Criteria |
| VU | Wildlife and Countryside Act 1981 (as amended) |
| WAC | Walkers, Cyclists and Horse Riders |
| WCA 1981 | The British Trust for Ornithology's Wetland Bird Survey |
| WCH | Water Framework Directive |
| WeBS | World Health Organization |
| WFD | Waste and Recycling Action Plan Theoretical Visibility |
| WHO | Written Scheme of Investigation |
| WRAP | Wastewater Treatment Works |
| WSI | Cross-linked Polyethylene |
| WwTW | Zone Infe |
| ZLPE | ZTV |

## Glossary

| Term | Description |
| :--- | :--- |
| 4YL | 4YL refers to the existing 400kV overhead line between Bramford <br> Substation and Pelham via Twinstead Tee. |
| 4YLA | 4YLA refers to the existing 400kV overhead line between Twinstead Tee <br> and Braintree. |
| Abnormal indivisible load | A vehicle that is used to transport very large equipment which by the <br> nature of the equipment cannot be broken into smaller multiple <br> deliveries, and has a weight of more than 44,000kg; or an axle load of <br> more than 10,000kg for a single non-driving axle and 11,500kg for a <br> single driving axle; or a width of more than 2.9m; or a rigid length of more <br> than 18.65m |
| Above Ordnance Datum | Above Ordnance Datum (AOD) refers to the height above mean sea- <br> level, taken from a reference point at Newlyn, Cornwall. This is the <br> national height system for Britain. |
| Access Points | A location connecting a construction site to the public highway. |
| Access Routes | A route used by construction traffic within the Order Limits to access a <br> working area from an access point. |
| of sounds from many sources near and far. |  |


| Term | Description |
| :--- | :--- |
| Amenity | A term used to describe the character or attractiveness of an area. The <br> assessment of amenity considers landscape and visual, noise and <br> vibration, and traffic and transport effects. |
| Ampere - Unit of electrical current. |  |
| Ancient Tree | A tree that has passed beyond maturity and is old in comparison with <br> trees of the same species and is characterised by biological, cultural or <br> aesthetic features of interest. |
| Ancient Woodland | Land that has been continually wooded since at least 1600 in England. <br> Regarded as 'irreplaceable habitat' in national planning guidance. |
| Ancient woodland greater than 2ha is recorded on the Natural England |  |
| Ancient Woodland Inventory. |  |


| Term | Description |
| :--- | :--- |
| Associated Development | Development for which consent is sought via the draft Development <br> Consent Order for the Bramford to Twinstead Reinforcement, but which <br> does not fall within the definition of a Nationally Significant Infrastructure <br> Project (NSIP). |
| Authorised Development | The development and associated development described in Part 1 of <br> Schedule 1 (authorised development) of the draft Development Consent <br> Order and any other development authorised by the Order, which is <br> development within the meaning of section 32 of the Planning Act 2008. |
|  | An automatic counter which records the total number of vehicles passing <br> along a designated road or highway, calculating a vehicle's speed and |
| category. |  |


| Term | Description |
| :---: | :---: |
| Borehole Survey | Used to determine soil and ground suitability for directional drilling and pylon foundations and to survey the borehole to determine its course and end point for Horizontal Directional Drilling (HDD). |
| Boundary capability | The capability of the transmission system to physically carry the amount of power required between areas whether that be thermal or stability capability. |
| British Geological Society | A public sector organisation we are responsible for advising the UK government on all aspects of geoscience as well as providing impartial geological advice to industry, academia and the public. |
| Busbar | The common connection point of two or more transmission circuits. |
| Cable | An insulated conductor designed for underground installation. |
| Cable circuit (underground) | Discrete electrical connection between two points on an electricity network. |
| Cable Sealing End | Structures used to transfer transmission circuits between underground cables and overhead lines. |
| Cable Sealing End Compound | Electrical infrastructure used as the transition point between overhead lines and underground cables. A compound on the ground acts as the principal transition point. |
| Cable Sealing End Pylon Platform | Electrical infrastructure used as the transition point between overhead lines and underground cables. A platform on the pylon acts as the principal transition point. |
| Cable working area | Working area required to construct the underground cable systems including; haul road, soil storage and installation of cables. |
| Carcinogen | Is any substance that is an agent directly involved in causing cancer. |
| Catchment | An area that serves a river with rainwater. Every part of land where the rainfall drains to a single watercourse is in the same catchment. |
| Category 2 fence | A barrier of 2.4 m in height with an electric pulse fence. |
| Category 3 fence | A barrier of 2.4 m in height without an electric pulse fence. |
| Chainages | The distance of any point along a line (road, watercourse or utility route) is denoted by its chainage, being its distance, measured along the centre line, from a chosen origin or start point of the road. The name 'chainage' has historical connotations based on a technique of measurement where steel chains of 100 links were once used to measure distances. |
| Circuit | A set of wires along which current flows and returns. It is necessary to have a complete circuit for current to flow. In AC transmission circuits, each consists of three phases. |
| Code of Construction Practice | A code of construction practice (CoCP) sets out the standards and procedures to which a developer (and its contractors) must adhere in order to manage the potential impacts of construction works. |
| Combined cycle gas turbine | A generator comprising a gas turbine together with a steam boiler and steam turbine utilising the waste heat from the gas turbine thereby achieving high efficiency. |


| Term | Description |
| :--- | :--- |
| Commitments | Measures that a developer commits to delivering as part of the project, <br> with the purpose of limiting, mitigating or compensating potential impacts <br> of the project. |
| A development that has full or outline planning permission, or is allocated |  |
| in an adopted development plan. |  |


| Term | Description |
| :--- | :--- |
| Corona Discharge | An electrical discharge caused by the ionisation of fluid such as air <br> surrounding a conductor carrying a high voltage. It represents a local <br> region where the air (or other fluid) has undergone electrical breakdown <br> and become conductive. A corona occurs at locations where the strength <br> of the electric field (potential gradient) around a conductor exceeds the <br> dielectric strength of the air. |
| County Wildlife Site | Non-designated areas of land important for their wildlife and nature <br> conservation value. Designation in Suffolk. |
| Cropmark | Evidence of the presence of sub-surface archaeological remains through <br> the differential growth in a crop. |
| Crown | The upper part of a tree measured from the lowest branch, including all <br> branches and foliage. |
| A channel or pipe that carries water below the level of the ground. |  |

$\left.\begin{array}{ll}\hline \text { Term } & \text { Description } \\ \hline \text { Double circuit } & \begin{array}{l}\text { This refers to the arrangement in which a total of six conductors are } \\ \text { provided to make two different transmission circuit. Both the circuits in } \\ \text { are mounted or run through the same transmission line. }\end{array} \\ \hline \text { Drainage Management Plan } & \begin{array}{l}\text { Identifies all known risks to the water environment and identifies } \\ \text { appropriate use of control measures to protect it from sources of } \\ \text { pollution during construction. }\end{array} \\ \hline \text { Dust } & \begin{array}{l}\text { Dust is defined as all particulate matter up to 75 } \\ \text { or thousandths of a millimetre) in diameter (according to BSths of a metre } \\ \text { both suspended in air and deposited from air. Particles less than 1 } 1 \mu m\end{array} \\ \text { behave more like gases than solids and are generally termed 'fume'. The } \\ \text { bulk of particulate matter generated by demolition and construction }\end{array}\right\}$
\(\left.$$
\begin{array}{ll}\hline \text { Term } & \text { Description } \\
\hline \text { Embedded design measures } & \begin{array}{l}\text { Measures for the protection of the environment that are embedded } \\
\text { (intrinsic) with the design. }\end{array} \\
\hline \text { Environmental Areas } & \begin{array}{l}\text { These are locations identified for environmental embedded measures, } \\
\text { mitigation and/ or biodiversity net gain/ environmental enhancement. }\end{array} \\
\hline \text { Environmental Clerk of Works } & \begin{array}{l}\text { An environmental specialist with responsibility for monitoring compliance } \\
\text { with planning consents, environmental permits, legislation and mitigation. }\end{array} \\
\text { (EnvCoW) } & \begin{array}{l}\text { An assessment of the likely effects of a development project on the } \\
\text { environment, which is reported in an Environmental Statement that is } \\
\text { publicised and consulted on and taken into account in the decision on } \\
\text { whether a project should proceed. }\end{array} \\
\hline \text { Environmental Impact Assessment } \\
\text { (EIA) } & \begin{array}{l}\text { The main output from the EIA process, an ES is the report required to } \\
\text { accompany an application for development consent (under the }\end{array}
$$ <br>
Infrastructure Planning (EIA) Regulations 2017) to inform public and <br>
stakeholder consultation and the decision on whether a project should be <br>
allowed to proceed. The EIA <br>

Regulations set out specific requirements for the contents of an\end{array}\right]\)| Environmental Statement (ES) |
| :--- | :--- |
| Es for Nationally Significant Infrastructure Projects. |

$\left.\left.\begin{array}{ll}\hline \text { Term } & \text { Description } \\ \hline \text { Extremely Low Frequency } & \begin{array}{l}\text { Defined as the range of frequencies from } 30 \text { to } 300 \text { Hz which include the } \\ \text { power frequencies of } 50 \text { or } 60 \text { Hz }\end{array} \\ \hline \text { Fault } & \begin{array}{l}\text { Electrical fault on a circuit or piece of transmission equipment for which } \\ \text { the circuit/equipment switches out automatically. }\end{array} \\ \hline \text { Fauna } & \text { All of the animals in a given area. } \\ \hline \text { Finished Ground Level } & \begin{array}{l}\text { The ground surface or the site after all construction, levelling, grading } \\ \text { and development has been completed. }\end{array} \\ \hline \text { Finished surface level } & \begin{array}{l}\text { The finished surface level of the foundations of plant and high voltage } \\ \text { equipment. }\end{array} \\ \hline \text { Flood defence } & \begin{array}{l}\text { Infrastructure used to protect an area against floods, such as floodwalls } \\ \text { and embankments. }\end{array} \\ \hline \text { Flood Risk Assessment } & \begin{array}{l}\text { A flood risk assessment is an assessment of the risk of flooding, } \\ \text { particularly in relation to residential, commercial and industrial land use. } \\ \text { In England and Wales, the Environment Agency requires a Flood Risk }\end{array} \\ \text { Assessment (FRA) to be submitted alongside planning applications in } \\ \text { areas that are known to be at risk of flooding. }\end{array}\right\} \begin{array}{ll}\text { compound directly from a pylon, without requiring a bulky terminal pylon. } \\ \text { This allows a larger span between the final pylon and the gantry. }\end{array}\right]$
$\left.\begin{array}{ll}\hline \text { Term } & \text { Description } \\ \hline \text { Functional floodplain } & \begin{array}{l}\text { This zone comprises land where water has to flow or be stored in times } \\ \text { of flood. The land would flood with an annual probability of } 1 \text { in } 20(5 \%) \\ \text { or greater in any year or is designed to flood in an extreme }(0.1 \%) \text { flood. }\end{array} \\ \hline \text { Gantries } & \begin{array}{l}\text { An overhead bridge-like structure supporting electrical equipment. A } \\ \text { transition point from overhead line equipment to equipment in a } \\ \text { compound. }\end{array} \\ \hline \text { Geoarchaeology } & \begin{array}{l}\text { The application of earth science principles and techniques to the } \\ \text { understanding of the archaeological record. }\end{array} \\ \hline \text { Geographical Information System } & \begin{array}{l}\text { GlS is a framework for gathering, managing and analysing data. It } \\ \text { analyses spatial location data and organises layers of information into } \\ \text { visualisations on maps. }\end{array} \\ \hline \text { Global Positioning System } & \begin{array}{l}\text { Global navigation satellite system that provides geolocation and time } \\ \text { information to the receiver anywhere in the world with an unobstructed } \\ \text { line of sight to four or more GPS satellites. }\end{array} \\ \hline \text { Habitats Regulations Assessment } & \begin{array}{l}\text { An owner or occupier of land where National Grid transmission } \\ \text { equipment is sited. }\end{array} \\ \hline \text { The process by which plans and projects are assessed as to whether } \\ \text { they are likely to have a significant effect on a European site either alone } \\ \text { or in combination with other plans or projects, under the Conservation of } \\ \text { Habitats and Species Regulations 2017, as amended. }\end{array}\right\}$

| Term | Description |
| :--- | :--- |
| Health and Safety Executive | The Health and Safety Executive (HSE) is the national independent <br> watchdog for work-related health, safety and illness. |
| Heavy Goods Vehicle | Goods vehicles weighing more than 3500kg. |
| Heritage Asset | A building, monument, site, place, area or landscape identified as having <br> a degree of significance meriting consideration in planning decisions, <br> because of its heritage interest. Heritage assets include designated <br> heritage assets and assets identified by the local planning authority <br> (including local listing). |
| A pipeline operating at above 7 bar or approximately 102 psi. |  |
| High Pressure Pipeline | 275,000 volts and over. National Grid's transmission lines generally <br> operate at 275,000 and 400,000 volts. Lower voltage line, such as <br> 132,000 volts and 33,000 volts are generally owned by local distribution <br> companies. |
| Hish Voltage | Architectural, designed, or other structures with a significant historical <br> value. These may include structures that have no aesthetic appeal or <br> structures not usually thought of as buildings, such as milestones or <br> bridges. |
| Historic Environment | All aspects of the environment resulting from the interaction between <br> people and places through time, including all surviving physical remains <br> of past human activity, whether visible, buried or submerged, and <br> landscaped and planted or managed flora. |
| Goulty (1989), and Planning Overhead Power Line Routes by RJB |  |


| Term | Description |
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| Horizontal Directional Drilling | Trenchless method for the installation of pipes, in a shallow arc using a surface-launched drilling rig. In particular, it applies to large-scale crossings in which a fluid filled pilot bore is drilled without rotating the drill string, and this is then enlarged by a washover pipe and back reamer to the size required for the product pipe. |
| Hydrogeology | The properties of groundwater in superficial and bedrock geology, especially occurrence and movement. |
| Hydromorphology | The physical character and water content of waterbodies. |
| Impact Magnitude | This is the scale of change which a given impact may cause. This is compared to the baseline state and consideration is given to how the change relates to accepted thresholds and standards. |
| Impact Risk Zones | The SSSI Impact Risk Zones (IRZ) are a GIS tool/dataset. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts. |
| Impact Significance | The level of significance is defined by the magnitude of impact in relation to the sensitivity/value of the environmental receptor. |
| Index of Multiple Deprivation | The official measure of relative deprivation for small areas in England. |
| Indicative Alignment | The alignment of the overhead lines and underground cables that was used within the Scoping Report. |
| Induced Spend | Devaluation of property caused by presence of apparatus. |
| Infiltration | Incident rainfall that percolates into the ground, rather than evaporating or running off. |
| Injurious Affection | Where legal rights held with land are interfered with but no interest is acquired from the claimant and there has been a resultant reduction in the value of that land. |
| Insulator | Used to attach the conductors to the pylons preventing electrical discharge to the steelwork. |
| Interbedded | In geology, interbedding occurs when beds (layers of rock) of a particular lithology lie between or alternate with beds of a different lithology. |
| Interconnector | A high voltage connection between the electricity transmission systems of different countries. |
| Internal Drainage Board | A type of operating authority which is established in areas of special drainage need in England and Wales with permissive powers to undertake work to secure clean water drainage and water level management within drainage districts. |
| Intervisibility | Intervisibility is defined as the ability to see in a direct line of sight from one position on the earth's surface to another, considering the intervening terrain. |
| Inundation | Flooding. |
| Invasive non-native species | An invasive non-native species is any non-native animal or plant that can spread, causing damage to the environment, the economy, health, and way of life. |


| Term | Description |
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| La10,T | LA10,T refers to the level exceeded for $10 \%$ of the measurement period, T. La10 is widely used as a descriptor of traffic noise. |
| Lago,t | Lago,t $^{\text {index }}$ represents the noise level exceeded for 90 percent of the measurement period, T , and is used to indicate quieter times during the measurement period. It is usually referred to as the background noise level. |
| $L_{\text {Aeq, }}$ T | The A-weighted Leq sound level measured over a specified period of time, T . |
| Lafmax, ${ }^{\text {a }}$ | Lafmax, $^{T}$ is maximum A-weighted sound level during the measurement period, T . |
| Land cover | The surface cover of the land, usually expressed in terms of vegetation cover or lack of it. Related to but not the same as land use. |
| Land Plot | Land known to be occupied (owned, rented or subject to servitude) by a Person with Interest in Land (PIL). |
| 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 agricultural and forestry. |
| Landform | The shape and form of the land surface resulting from combinations of geology, geomorphology, slope, elevation and physical processes. |
| Landscape | An area, as perceived by people, the character of which is the result of the action and integration of natural and/or human factors. |
| 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. |
| Landscape Character Assessment | A systematic process of analysing and describing variation in the character of the landscape, and using this information to assist in managing change in the landscape. Landscape character assessment seeks to identify and explain the unique combination of elements and features that make landscapes distinctive. |
| Landscape Character Type | Distinct types of landscape that are relatively homogenous in character. |
| Landscape Elements | Individual components which make up the landscape, such as trees and hedges. |
| Landscape susceptibility | The ability of the landscape (whether it be the overall character or quality/condition of a particular landscape type or area, or an individual element and/or features, or a particular aesthetic and perceptual aspect) to accommodate the proposed development without undue consequences for the maintenance of the baseline situation. |
| Landscape value | The relative value that is attached to different landscapes by society. A landscape may be valued by different stakeholders for a whole variety of reasons. |
| Lattice Pylon | Pylon type widely used on the national electricity transmission networks. |
| Lead Local Flood 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. They also have lead responsibility for managing the risk of flooding from surface water, groundwater and ordinary watercourses. |


| Term | Description |
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| Letter of No Impediment | Letter of No Impediment provide the Planning Inspectorate with confidence that Natural England, as the relevant licensing authority, has considered the issues relating to protected species. |
| Light Detection and Ranging | LiDAR is a remote sensing technique which measures distance by illuminating a target with a laser and analysing the reflected light. In this case, sensors mounted on aircraft were used to generate very high resolution mapping of the ground surface. This use of LiDAR is particularly important as it can identify very subtle surface variations, such as ploughed-out earthworks or geoarchaeological features, which might not otherwise be visible to surveyors. LiDAR survey can also be used to identify earthworks which are within areas of woodland or standing crops. |
| Light Goods Vehicles | Goods vehicle weighing 3500kg or less. |
| Limits of Deviation | LoD allow for adjustment to the final positioning of the permanent infrastructure for example to avoid localised constraints or unknown or unforeseeable issues that may arise. This could include, previously unidentified poor ground conditions may require a pylon to be moved slightly for geotechnical reasons, such as ground stability. The horizontal LoD define the parameters within which the position on the ground of proposed permanent infrastructure may deviate from the position shown on the plans. This applies to both linear (for example overhead line and underground cables) and non-linear (for example the GSP substation and CSE compounds) proposed infrastructure. Vertical LoD limit the maximum vertical height, or the depth below ground, of any new infrastructure. |
| LINSIG | Traffic modelling software to design traffic signals. |
| Listed Building | A measure of a building's special architectural and historic interest. There are three categories of listed buildings, Grade I, II* and II depending on the level of interest. |
| Lithology | The lithology of a rock unit is a description of its physical characteristics visible at outcrop, in hand or core samples or with low magnification microscopy, such as colour, texture, grain size, or composition. |
| Lnight,outside | Refers to the EU definition in Directive 2002/49/EC: equivalent outdoor sound pressure level associated with a particular type of noise source during night-time (at least 8 hours), calculated over a period of a year. |
| Local Development Framework | Local Authority documents containing planning policies for the district. |
| Local Nature Reserve | Sites dedicated by the local authority under Section 21 of the National Parks and Access to the Countryside Act 1949 for nature conservation which have wildllife or geological features that are of special interest locally. |
| Local Planning Authority | The public authority whose duty it is to carry out specific planning functions for a particular area. |
| Local Wildlife Site | Non-designated areas of land important for their wildlife and nature conservation value. Designation in Essex. |
| Long term | This is used to describe an impact of long duration or irreversible. It is assumed to be greater than 15 years post construction. |


| Term | Description |
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| Lower-layer Super Output Area | A geographic hierarchy designed to improve the reporting of small area <br> statistics in England and Wales. |
| Lowest Observed Adverse Effect | This is the level of noise above which adverse effects on health and <br> quality of life can be detected. |
| Level (Sound power levels) | These are used to describe the noise output of a noise source. |


| Term | Description |
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| Mitigation | The action of reducing the severity and magnitude of change (impact) to <br> the environment. Measures to avoid, reduce, remedy or compensate for <br> significant adverse effects. |
| National Character Areas | NCAs divide England into 159 distinct natural areas. Each is defined by a <br> unique combination of landscape, biodiversity, geodiversity and cultural <br> and economic activity. Their boundaries follow natural lines in the <br> landscape rather than administrative boundaries, making them a good <br> decision making framework for the natural environment. |
| National Cycle Network | A series of traffic-free paths and quiet, on-road cycling and walking <br> routes that connect to every major town and city. These routes are <br> promoted for both recreational and active travel purposes. |
| National Electricity Transmission | The NETS SQSS sets out a coordinated set of criteria and <br> methodologies that the Transmission Licensees shall use in the planning <br> and operation of the national electricity transmission system. |
| System Security and Quality of | National Grid Electricity System Operator controls the movement of <br> electricity around the country, transporting power from generators (such |
| National Grid Electricity System |  |
| Operator | as wind farms) to local distribution network operators. It does not <br> distribute electricity to individual premises, but its role in the wholesale <br> market is vital to ensuring a reliable, secure and quality supply to all. |
| Noise Important Area | Determined via strategic noise maps and highlight the residential areas <br> experiencing the highest 1\% of noise levels from road and rail sources in <br> England. |
| This is the noise level below which no effect can be detected. In simple |  |
| terms, below this level, there is no detectable effect on health and quality |  |
| of life due to the noise. |  |


| Term | Description |
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| Noise sensitive receptor | A location that is sensitive to noise and/or vibration. The sensitivity of a receptor to noise and vibration varies depending on the receptor type. |
| Nominal Voltage | A value assigned to a circuit or system to designate its voltage class conveniently e.g., 400 kV , 275 kV , rather than its operating voltage |
| Non-prescribed Consultees | Additional consultees not required to be consulted under the Planning Act 2008. |
| Non-statutory designated site | A site designated at a local level for its biodiversity and/or geological value. These are not underpinned by legislation. |
| Numerical Dosimetry | Calculation and assessment of the induced current by the human body. Computerized models of the human body, including the varying tissue conductivities are used to calculate the induced current inside the body when exposures to external EMF. |
| One-way Movement | One vehicle movement, either to or from a work site, so for example a delivery to a site will consist of two one-way movements, one to the site carrying a load and one running empty away from the site. |
| Optical Ground Wire | Combines the role of earthing the overhead line and providing fibre optic capability for telecommunications. |
| Optimum Phasing | A design feature of double-circuit overhead lines that reduces the electric and magnetic fields at perpendicular distances from the overhead line. |
| Order Limits | The maximum extent of land within which the authorised development may take place. |
| Ordinary Watercourse | Watercourses that are not main rivers, and that Lead Local Flood Authorities, district councils and Internal Drainage Boards maintain. |
| Ordnance Datum | A vertical datum point used by the OS as a reference point for the level or altitude of any point. |
| Outage | A period of interruption to electricity supply. |
| Outcrop | A proportion of bedrock or other stratum protruding through the soil level. |
| Outline Written Scheme of Investigation | Sets out the steps that need to be taken to mitigating the predicted effects on archaeology, geo-archaeology and historic landscape heritage assets. |
| Overhead Line | Conductor (wire) carrying electric current, strung from pylon to pylon. |
| Overhead line refurbishment | Repair and renewal of conductors, earthwire, fittings and insulators and, where necessary, remedial works to the pylon and foundations. |
| PCB | PCB refers to the existing 132kV overhead line owned and operated by the distribution network operator UKPN. |
| Peak Flow | The highest number of vehicles in a certain flow during a given scenario. |
| Peak Particle Velocity | A measurement of vibration level, being the maximum rate of displacement of the vibration propagation medium (such as the ground) for a given event, such as the impact of a piling hammer, at specific locations. |


| Term | Description |
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| Percentile or Statistical Levels | Calculation of the noise level which is exceeded for a certain percent of a total period. Background noise is often defined as the A-weighted sound pressure level exceeded for $90 \%$ of the specified period $T$, expressed Lenot. Road traffic noise is often characterised in terms of LA10,18h. $^{\text {R }}$ |
| Permanent access bellmouth | A flared vehicular access/egress point connecting a permanent operational route to the public highway, designed to accommodate turning movements by large vehicles. It may involve creating visibility splays, which is a safety feature where vegetation may be removed from the bellmouth to enable a driver to see down the road and know when the road is clear. |
| Permanent operational access point | A permanent road constructed to convey maintenance vehicles in order to maintain infrastructure when operational. |
| Permitted reserve | A mineral reserve that has planning permission for extraction. |
| Persons with an interest in land | Persons with an interest in land which is the subject of the Development Consent Order (DCO) (within Category 1, 2 or 3 as set out in section 44 of the Planning Act 2008. |
| Phasing | The way in which the two circuits of a power line are wired relative to each other, which affects the magnetic field produced |
| Piling | The installation of bored and driven piles and the effecting of ground treatments by vibratory dynamic and other methods of ground stabilisation. |
| Planned outage | Planned switching out of a circuit or piece of transmission equipment for maintenance or access. |
| Planned transfer | The amount of power expected to be transferred between two areas of the transmission system during normal operation. |
| Planning and Compulsory Purchase Act 2004 | An Act to make provision relating to spatial development and town and country planning; and the compulsory acquisition of land. |
| Pluvial Flooding | Flooding that results from rainfall-generated overland flow, before the runoff enters any watercourse or sewer. |
| Potential roost feature | Potential roosting features in buildings are features used as bat roosts include (but are not limited to) gaps between stone or brickwork or cracks and splits in trees. |
| Preferred Corridor | The corridor that balances the technical, economic and environmental considerations and National Grid's duties, as identified through the assessment presented in the Route Corridor Study. |
| Preliminary Environmental Information Report | Information that has been compiled by the applicant to support statutory consultation held in advance of submitting an application for development consent. The Preliminary Environmental Information Report should contain information reasonably required for the consultation bodies to develop an informed view of the likely significant environmental effects of the development and any associated development. |
| Prescribed Consultees | Persons and organisations required to be consulted about the project under sections 42, 43 and 44 of the Planning Act 2008 and set out in Schedule 1 of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009. |


| Term | Description |
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| Principal Aquifer | These are layers of rock or drift deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale. In most cases, principal aquifers are aquifers previously designated as major aquifer. |
| Priority habitat | Habitats identified as of principal importance in England, in accordance with requirements of the Natural Environment and Rural Communities Act 2006. These are based on the UK Biodiversity Action Plan Priority Habitats. |
| Priority Hazardous Substance | Substances which are toxic and persistent in the water environment, defined by the Water Framework Directive. |
| Priority species | Species identified as of principal importance in England, in accordance with requirements of the Natural Environment and Rural Communities Act 2006. These are based on the UK Biodiversity Action Plan Priority Species. |
| Private Water Supplies | Individual water systems, generally wells and springs, serving one or several residences. |
| Proposed Alignment | This term is used to help communicate the potential alignment of the project within the application. |
| Protected lane | Country lanes and byways of historic and landscape value that make an important contribution to rural character, which have been designated as having 'protected lane' status in development planning policy. |
| Public Right of Way | A footpath, bridleway or byway accessible to all members of the public. |
| Pulling Site | A site where the winching equipment that is used to pull through the new conductors is located. |
| Pylons | Structures that support the overhead line (conductors). There are two types of pylons; suspension (line), where the conductors are simply suspended from the tower and tension (angle). |
| Radio Frequency | Frequencies much higher than power frequencies, where radio and TV broadcasts and mobile phones operate. |
| Radio Frequency Interference | Any electromagnetic phenomenon, which may degrade the performance of equipment in the radio spectrum. An electromagnetic disturbance may be electromagnetic noise, an unwanted signal or a change in the propagation medium itself. |
| Ramsar site | Sites designated under the Ramsar Convention. The designation covers all aspects of wetland conservation and use, recognising wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the wellbeing of human communities. |
| Rating Level | The A-weighted, Leq, sound pressure level of the sound in question at the assessment location over time period T , adjusted for any tonal character and impulsiveness. |
| RB | RB refers to the proposed electricity transmission line between Bramford Substation and the proposed Stour Valley West Sealing End Compound. |
| Receptor | The physical resource or user group that would respond to an effect e.g. somebody or something adversely affected by a pollutant. |


| Term | Description |
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| Reconductoring | The replacement of old conductors (wires) on an existing overhead line. |
| Record of Condition | Document detailing land condition before works begin. |
| Referencing | The gathering of information relating to land ownership, tenancies and all <br> other interests in land along the route of the pipeline corridor. |
| Refurbishment | The replacement of old conductors (wires), insulators, earthwires, etc on <br> an existing overhead line. |
| Registered Park and Garden | A park or garden included on Historic England's Register of Historic <br> Parks and Gardens. Sites are graded I, Il* or Il like listed buildings. |
| Registered Waste Carrier | The Control of Pollution (Amendment) Act 1989 and the Controlled <br> Waste (Registration of Carriers and Seizure of Vehicles) Regulations <br> 1991 require that any person who transports/makes arrangements for <br> management of waste in the course of any business without being <br> registered with the appropriate registration authority commits an offence, <br> unless they are exempt. |
| Representative Viewpoints | Representative viewpoints, as defined by GLVIA3, are selected to <br> represent the experience of different types of visual receptor, where <br> larger numbers of viewpoints cannot all be included individually and <br> where the significant effects are unlikely to differ. |
| A defined linear area identified on a map which may be of variable width |  |
| Rond whose extent at any point is typically defined by constraints or |  |
| differentiation from other route corridors. |  |


| Term | Description |
| :---: | :---: |
| Route Corridor Study | An appraisal of the high-level planning and environmental constraints to identify potential route corridor options within a defined study area. |
| Scheduled Monument | An historic building or site whose heritage interest is nationally important, that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. Covered by the Ancient Monuments and Archaeological Areas Act 1979. |
| Scoping | Scoping is the process of determining the content and extent of matters that should be covered in the environmental impact assessment. |
| Scoping Boundary | An area around the Indicative Alignment which is used for scoping purposes to define an area within which the final Order Limits are likely to lie. It is based on a buffer of 200 m around the Indicative Alignment. |
| Scoping Report | Report determining the content and extent of matters that should be covered in the environmental impact assessment. |
| Section | Geographical 'sections' have been identified that break the project down into smaller units for ease of description within the documentation. |
| Section 42 (of the Planning Act 2008) (s42) | Section of the Planning Act 2008 requiring consultation of specifically identified groups |
| Section 42 consultees (s42 consultees) | Statutory stakeholders as defined by the Planning Act 2008. |
| Section 47 (of the Planning Act 2008) (s47) | Section of the Planning Act 2008 requiring consultation of the local community and preparation of a Statement of Community Consultation setting out how such consultation will be conducted. |
| Section 48 (of the Planning Act 2008) (s48) | Section of the Planning Act 2008 requiring publication of notices regarding statutory consultation. |
| Sensitivity | A term applied to specific receptors, combing judgements of the susceptibility of the receptors to the specific type of change or development proposed and the value related to that receptor. |
| Sequential Test | The risk-based approach for assessing flood risk presented in National Planning Policy Framework. The Sequential Test advocates development in areas of lowest risk first. |
| Sequential Views | Sequential views are views recorded along the length of public routes identified for assessment. A description records changes to views as the receptor travels along the identified route. |
| Setting | The surroundings in which a heritage asset or landscape designation 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 or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral. |
| Severance | The extent to which members of communities or habitats are able (or not able) to move around their community and access services/facilities. |
| Short term | This is used to describe an impact of short-term duration or reversible within the short term, which is assumed to be up to five years after construction. |
| Significance | A measure of the importance or gravity of the environmental effect, defined by significance criteria specific to the environmental topic. |


| Term | Description |
| :---: | :---: |
| Significant observed adverse effect level (SOAEL) | This is the level of noise above which significant adverse effects on health and quality of life occur. |
| Single circuit CSE compound | A term used to describe the small single circuit sealing end closure at the GSP substation, to differentiate it from the larger CSE compounds used on the main transmission line. |
| Site of Special Scientific Interest | A statutory designation under the Wildlife and Countryside Act 1981 (as amended), protecting nationally important wildlife sites, habitats and geological sites. |
| Soil association | Represent a group of soil series (soil types) which are typically found occurring together in the landscape. |
| Soil compaction | Degradation of soil structure, which can be caused by heavy loading, resulting in a breakdown of the soil structural units (peds) and a reduction in the voids within the soil. |
| Soil stockpiles | Mounds of soil created through the storage of soil materials which have been stripped from an area of construction. |
| Sound | Sound is vibrations travelling through a medium (usually air) that the can be perceived by the hearing organs. |
| Source Protection Zone | A defined area around a drinking water source that carries statutory protection from damaging activities. |
| Span / Span Length | The distance between adjacent pylons. |
| Special Area of Conservation | Protected sites designated under the Habitats Directive, representing internationally important, high-quality conservation sites. |
| Special Protection Area | Site of European importance for bird conservation designated under the Birds Directive. |
| Species | A group of living organisms consisting of similar individuals capable of exchanging genes or interbreeding. |
| Standard Industrial Classifications (Standard Industry Code) | A system for classifying industries. |
| Statement of Community Consultation | Statement of Community Consultation in accordance with Section 47 of the Act - A statement of how consultation will be undertaken published by National Grid prior to statutory consultation, as required by the Planning Act 2008, and following consultation with the local planning authorities. |
| Statutory Consultation | The formal period of public consultation, prior to deciding a planning application. |
| Statutory Consultee | A national public organisation or body that must be consulted with on planning applications, depending on the nature of the development and its location. |
| Statutory designated site | A site which receives protection by means of legislation in recognition of its biodiversity value. |
| Statutory Undertakers | Persons with regulatory powers and duties, such as gas, electricity, water and transport providers or transmitters. |


| Term | Description |
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| Strategic Flood Risk Assessments | Strategic Flood Risk Assessments (SFRAs) are a required part of the local planning process. SFRAs are primarily produced by local planning authorities, in consultation with the Environment Agency, and are intended to form the basis for preparing appropriate policies for flood risk management at the local level. |
| Stratum | In geology and related fields, a stratum is a layer of sedimentary rock or soil with internally consistent characteristics that distinguish it from other layers. |
| Stringing positions | Areas used for stringing/installing new electrical equipment, such as wires and conductors on pylons. |
| Subsoil | Weathered soil layer extending between the natural topsoil and the unweathered basal layer (geological parent material, either solid or drift) below. |
| Substation | Substations are used to control the flow of power through the electricity system. They are also used to change (or transform) the voltage from a higher to lower voltage to allow it to be transmitted to local homes and businesses. |
| Super Output Area | One of a range of statistical geographies developed by the Office for National Statistics. They are subdivided into Lower Layer Super Output Areas and Middle Layer Super Output Areas. They are intended to be of consistent size with stable boundaries They were designed to improve the reporting of small area statistics and are built up from groups of Output Areas. |
| Superficial geology | Uncemented sediments, such as alluvium, immediately beneath the soil and above the bedrock. |
| Suspended Solids | Non soluble particles, such as sand grains and silt particles, carried in suspension in water. |
| Suspension Pylon | Pylon where conductors are suspended by a vertical insulator string. Suspension pylons support the conductors on straight stretches of overhead line. |
| Synchronism | When the transmission system is operating at the same frequency (speed) of 50 Hz the system is synchronised. When one part of the system splits away or starts to operate at a different frequency this is a loss of Synchronism. |
| Tee Point | The point at which two electrical routes connect together. |
| Temporary access bellmouth | A flared vehicular access/egress point connecting a construction site to the public highway, designed to accommodate turning movements by large vehicles. It may involve creating visibility splays, which is a safety feature where vegetation may be removed from the bellmouth to enable a driver to see down the road and know when the road is clear. |
| Temporary construction access route | A temporary road constructed to convey construction vehicles through the working areas. These can be made of imported stone or using protective covering such as Trakmat. These would be removed at the end of construction. |
| Temporary construction area | The additional temporary construction space required to construct the project in a particular area, but which will not be required once construction has taken place. |


| Term | Description |
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| Temporary overhead line diversions and pylons | Temporary diversions of existing overhead line may be required to ensure electricity flows are maintained at all times during construction of the project to limit the disruption to the electricity network. These typically comprise a short section of overhead line with temporary structures or pylons which electricity flows are diverted along. |
| Tensioning site | A site where the new conductor is fed out from during construction. This also includes a tensioning winch to keep the conductor off the ground. |
| Terminal pylon | Pylons erected at the end of the overhead line to terminate the line at substations or where overhead lines are connected to underground cables. Because of the uneven load on one side of the pylons, much deeper and heavier foundations are required on the unloaded side. |
| Thematic Group | Groups of statutory and non-statutory consultees convened around specific topic areas to help to shape the surveys undertaken as part of the environmental assessment and discuss their respective findings. |
| Time Weighting | Sound level meters use various averaging times for the measurement of Route Mean Square sound pressure level. The most commonly used are fast ( 0.125 s averaging time), slow (1s averaging time) and impulse ( 0.035 s averaging time). Variables that are measures with time weightings are expressed as LAFmax etc. |
| Topic | A subject area covered within the EIA, for example landscape and visual or biodiversity. |
| Topsoil | The uppermost layer of soil, usually with the highest concentration of nutrients, organic matter and microorganisms. |
| T-pylon | An alternative type of pylon, has a single pole and T-shaped cross arms, which hold the wires in a diamond shape. |
| Track out | The transport of dust and dirt from the construction/demolition site onto the public road network, where it may be deposited and then resuspended by vehicles using the network. |
| Tranquillity | A state of calm and quietude associated with peace, considered to be a significant asset of landscape. |
| Transmission line | A National Grid overhead line which transmits electricity between National Grid's substations. Power is transmitted at high voltages (275kV or above) between power stations where it is generated and the local electricity supply networks of the regional distribution network operators where it is transformed to lower voltages ( 132 kV or below) for supply via distribution lines to local communities. |
| Transport Assessment | A TA is a comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies what measures will be taken to deal with the anticipated transport impacts of the scheme. |
| Transposed/Untransposed | Each pylon contains two circuits, one on each side of the pylon. Each circuit has three 'phases' which are arranged vertically. If the circuits are 'transposed', the phase order on one side of the pylon is the reverse of that on the other side, (this is often referred to as optimal phasing). If the circuits are 'untransposed', the phase order is the same on both sides of the pylon. |


| Term | Description |
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| Trenchless crossing | A crossing installation method that has limited above ground disturbance which is used to avoid a sensitive feature such as an environmental feature. |
| UK Power Networks | UK Power Network means UK Power Networks (Operations) Limited (registered company number 03870728) and/or its affiliate Eastern Power Networks plc (registered company number 02366906) as applicable. |
| Underdrainage | Sometimes called field drainage, it is a system of pipes made of plastic or clay that are laid under agricultural land typically at a depth of 0.75 to 1.5 m . Underdrainage rapidly removes excess soil water to reduce or eliminate waterlogging (a condition when all empty spaces in the soil are filled with water) and return the soils to their natural field capacity (when the water drained away from large soil pores under the force of gravity and some air is present). Underdrainage is connected to open drainage ditches at field boundaries which collect the water and transport it away from the field. |
| Underground cabling | An insulated conductor carrying electric current designed for underground installation. Underground cables link together two cable sealing end compounds. |
| Unproductive Aquifer | These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow. |
| Uprating | Changing the capacity of existing overhead line by replacing the existing conductors with larger capacity conductors |
| Verified Photomontage | A visualisation which superimposes an image of a proposed development upon a photograph or series of photographs, using a method that is able to be replicated or 'verified' by others. The information required to replicate the process of creating the visualisation is retained. |
| Viewpoint | They are points in space from where a view is obtained. These can actual or virtual. |
| Visibility splays | Areas of tree/vegetation removing, typically where access points are to enable a driver to see down the road and know when the road is clear. |
| Visual Amenity | The value of a particular area or view in terms of what is seen. |
| Visual Receptor | Individuals and/or defined groups of people who could be affected by a project impacting on their views. |
| Visual susceptibility | The ability of a visual receptor to accommodate a project. |
| Visualisation | A computer simulation, photomontage or other technique illustrating the predicted appearance of a project to aid engagement with consultees. |
| Volt per metre | The unit of electric field (electric stress or voltage gradient). |
| Voltage | The electrical potential difference between two points. |
| Voltage Source Convertors | A type of HVDC converter which uses electronic switches which can be controlled on and off. |
| Water Framework Directive | The Water Framework Directive (2000/60/EC) commits European Union member states to achieve good qualitative and quantitative status of all water bodies. |


| Term | Description |
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| Watt | The unit of electric power, product of Volts x Amperes. |
| Wayleave Agreement | Annual Licence granted by the owner and/or occupier of land giving <br> National Grid the right to install, access, maintain, repair and remove its <br> equipment. Wayleave Agreements may be express or implied. Terms of <br> the Wayleave Agreement provide for the annual rental and <br> compensation payments to be made in accordance with the National <br> Schedule Of Wayleave payments. |
| Working area | The working area refers to the area of land that is likely to form part of <br> the construction site. |
| Zone of Influence | The defined geographic area within which the project's environmental <br> receptors are located. |
| The area of potential or theoretical visibility of the development based <br> upon the height of the ridgelines applied to DTM (digital terrain model) <br> data for a defined study area using a suitable software programme. The |  |
| DTM does not take into account the influence of built development and |  |
| vegetation such as tree cover and any local variations 'smoothed out' by |  |
| using data aggregated by taking spot heights on a 50m grid. Also |  |
| sometimes called a ZVI (Zone of Visual Influence). |  |

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