

Havant Thicket Reservoir Project

Environmental Statement Volume 2 – Main Report Chapters 21 and 22 Conclusion and Glossary

Portsmouth Water Ltd.

03/09/20

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Notice

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Contents

Chapter	Page
21. Conclusion	4
Overview	4
Summary of significant effects	4
22. Glossary	7

21. Conclusion

Overview

- 21.1. This ES supports two outline planning applications, submitted by Portsmouth Water, for a new reservoir at Havant Thicket and a pipeline between the reservoir and Bedhampton pumping station ('The Scheme'). The new reservoir will secure reliable drinking water supplies for decades to come, while maximising the community and environmental benefits of a new raw water reservoir.
- 21.2. The pipeline would transfer water from Bedhampton Springs to fill the reservoir in the winter and draw water off for treatment and supply when needed in the summer. It would also be used for emergency drawdown should the reservoir levels need to be reduced in emergency conditions, in accordance with the Environment Agency (EA) safety guidance.
- 21.3. Complementary to its infrastructure resilience function, the Scheme would provide a new recreational resource adjacent to one of the more deprived areas in south Hampshire which would include a visitor centre, accessible open space, a network of trails linking to the wider area and a new wetland habitat and associated area for nature conservation.
- 21.4. The proximity of the reservoir to the internationally important Chichester and Langstone Harbour means that the new wetland can be used as a safe retreat for roosting birds when there is disturbance in the Harbour Special Protection Area (SPA) and Special Area of Conservation (SAC). The construction of the reservoir will result in substantial reductions in nutrients loads to the harbour.
- 21.5. The design of the reservoir has been environmentally led. It has sought to integrate operational and visitor facilities within the landscape to provide an attractive setting for the Scheme, minimise its visual and environmental impact and maintain the rural character of the site.
- 21.6. The primary purpose of an ES is to gather, assess in a systematic manner and collate information on the anticipated significant effects of a development on the environment in the form of an Environmental Impact Assessment, in order that this information can be properly considered by the planning authority before a decision on the development is made.
- 21.7. The assessment of significant effects has been undertaken in the previous chapters of the ES, and in this chapter the information has been summarised to reflect the overall conclusions of the assessment.
- 21.8. This ES has been prepared within the EIA procedure to accompany the planning applications. It outlines the Scheme, the likely significant environmental effects and any mitigation proposals necessary to reduce adverse effects.

Summary of significant effects

- 21.9. With the implementation of mitigation measures that are outlined within the topic chapters (and detailed in Appendix A2.1 OEMP of the ES Volume 4), the residual effects on the environment from the construction and operation of the reservoir would be reduced and in most cases would not be significant.
- 21.10. During construction and operation of the pipeline, this ES has identified that there would be no significant effects following successful implementation of mitigation measures identified in the OEMP (as defined in Appendix A2.1 in Volume 4).

Significant adverse effects

- 21.11. The table below details those effects during construction and/or operation, which remain significant following the application of mitigation.

Table 6.1 Significant effects

Topic	Effect	Details
Historic Environment	The reservoir construction and operation would result in an adverse significant effect on two heritage assets: the high value Grade II* RPG at Leigh Park (NHLE 1000112) and the medium value Sir George Staunton Conservation Area.	This effect would be offset to some degree through interpretation and enhancement measures reflecting the significance and development of the RPG.
Biodiversity	Significant residual adverse effects of the Scheme at a regional and county level as a result of the direct loss of ancient woodland, habitat within SINCs, priority habitat and watercourse.	While suitable compensation will be undertaken, this would still constitute loss of irreplaceable habitat for ancient woodland and veteran trees.
Water	During construction upon successful implementation of mitigation measures identified in the REAC as part of the OEMP in Appendix 2.1 of the ES, there would be residual adverse significant effects associated on aquatic habitats, habitat connectivity and geomorphology. There is a potential for deterioration for Hermitage Stream WFD waterbody as a result of reservoir construction.	These are associated with the loss of 3.7 km of headwater stream habitats being lost and permanent change to the outline of superficial aquifers.

Significant beneficial effects

- 21.12. The Scheme's primary purpose is to protect the nationally designated River Test and internationally designated River Itchen by providing an alternative, low impact, reliable and naturally maintained future water supply, which will ensure the continued viability of communities in West Sussex and Hampshire that already suffer from 'serious water stress'.
- 21.13. In addition, it would provide significant new green infrastructure and an accessible recreational facility and wildlife area next door to one of the more deprived areas in south east Hampshire, generating substantial health (physical and mental), educational, social and quality of life benefits by encouraging outdoor activity and connecting people to nature.
- 21.14. The reservoir would also result in the creation of a mosaic of new and high-quality habitats, including a new wetland, enhance land and environment management for biodiversity on the wider site through collaboration with Forestry England and Hampshire County Council, and restore and create off-site high biodiversity value habitats through partnership with the Hampshire and Isle of Wight Wildlife Trust, including landscape scale benefits for Bechstein's bat.
- 21.15. The benefits of the construction and operation of the reservoir and pipeline, which have been identified and assessed as significant within this ES, are summarised as follows:
- Benefits are associated with the presence of a reservoir, including provision of new wetland habitat and creation of new open water habitat. Upon successful implementation of the Outline Biodiversity Mitigation and Compensation Plan, there will be further benefits to the flow regime and productivity in the downstream Riders Lane Stream and Hermitage Stream as a result of a more consistent flow regime and more consistent water quality inputs.

- There is also a substantial benefit to the downstream Langstone Harbour SAC SPA SSSI Ramsar in terms of nitrogen load. This is a result of the diversion of nitrogen rich spring water from the estuary into the reservoir. The benefit will be very large during reservoir filling after which the benefits will vary seasonally.
- The reservoir would result in the creation of new habitats of ecological value, particularly the wetland along the northern edge of the reservoir. It is considered likely that habitats of at least County value would establish. A number of reservoirs have been recognised for their national or even international ornithological interest so greater value is possible.
- Significant beneficial effects on the local population during construction of the Scheme would be derived from support to the local supply chain and the creation of employment opportunities. This could provide financial security and contribute to self-esteem, particularly for low-income groups in the area.
- The improvement in open space provision in an area accessible to local users will support health and outdoor recreation, help instill a sense of place and enhance nature. All facilities proposed have been designed to engage families, schools and community groups in education. This is expected to result in significant beneficial effects for the local population and visitors from further afield. New recreational facilities for all ages, abilities and groups would be provided adjacent to a relatively deprived area. This will bring significant physical and mental health benefits by encouraging activity and connecting people to nature.
- The Scheme comprises a variety of terrain, landscapes and route lengths for walkers, cyclists and horse riders which will be well connected to existing routes beyond the site and will provide safe access into the site. This improved provision is expected to have significant beneficial effect physical activity and social connectivity.
- The increase in visitors to the Site would benefit local businesses and potentially create jobs. This could positively affect mental and physical health, particularly for low-income groups in one of the more deprived areas of South East Hampshire.
- A number of local businesses would benefit due to the increase of visitors to the reservoir. The Scheme would lead to the creation of new direct and indirect jobs, through supply chain benefits and new expenditure introduced to the local economy. Opportunities to provide work and training to local communities will be identified.

22. Glossary

Term/Acronym	Definition
AADT	Annual Average Daily Traffic – The number of vehicles travelling on a particular stretch of road on an average day.
ACS	Asbestos Contaminated Soil
ADMS Roads	A comprehensive software tool for investigating air pollution problems due to networks of roads that may be in combination with industrial sites.
Affected Road Network	The parts of the road network that would be affected by a change in traffic levels as the result of a transport scheme
AIA	Arboricultural Impact Assessment
AIES	Assessment of Implications on European Sites
ALC	Agricultural Land Classification – A framework for classifying land according to the extent to which its physical or chemical characteristics impose long term limitations on agricultural use. Agricultural land is classified into five categories according to versatility and suitability for growing crops. The top three grades, Grade 1, 2 and 3a, are referred to as 'Best and Most Versatile' land.
Annual Average Daily Traffic	The number of vehicles travelling on a particular stretch of road on an average day.
AOD	Above Ordinance Datum
AONB	Area of Outstanding Natural Beauty – An area outside a National Park designated for conservation due to its natural beauty.
AQAP	Air Quality Action Plan
AQMA	Air Quality Management Area – An area identified where the National Air Quality Objectives are not likely to be achieved. The Local Authority is required to produce a Local Air Quality Action Plan to plan how air quality in the area is to be improved.
AQS	Air Quality Strategy – The AQS sets out air quality objectives and policy options to further improve air quality in the UK from today into the long term.
Archaeological Priority Area	An area where there is significant known archaeological interest or potential for new discoveries. They are used to highlight where development may affect heritage assets.
ARN	Affected Road Network – The parts of the road network that would be affected by a change in traffic levels as the result of a transport scheme.
ASNW	Ancient Semi Natural Woodlands
ASPT	Average Score Per Taxon
AST	Appraisal Summary Table – A table that appraises the performance of each option against economic, environmental, social and distributional sub-impacts and is used to directly inform the Value for Money assessment for the Economic Case.
AURN	Automatic Urban and Rural Network
Baseline	Also referred to as the 'baseline situation', this term describes the existing nature of the landscape and the visual environment within the study area at a fixed point in time, as well as any changes likely to occur independently of the proposed development, including the legislative and planning context and any relevant published guidance.

Term/Acronym	Definition
BAP	Biodiversity Action Plan - An internationally recognized program addressing threatened species and habitats and is designed to protect and restore biological systems. The original impetus for these plans derives from the 1992 Convention on Biological Diversity.
BEIS	Department of Business, Energy and Industrial Strategy
BGS	British Geological Survey - A partly publicly-funded body which aims to advance geoscientific knowledge of the United Kingdom landmass and its continental shelf by means of systematic surveying, monitoring and research.
BLM	Biotic Ligand Model
BMV	Best and Most Versatile – Defined as Grades 1, 2 and 3a of the Agricultural Land Classification as land which is most flexible productive and efficient in response to inputs and which can best deliver future crops for food and non-food uses such as biomass, fibres and pharmaceuticals.
BMWP	Biological Monitoring Working Party scoring system
BNG	British National Grid
BNL	Basic Noise Level
BNS	Biological Notification Sites
BoCC	Red listed birds of conservation concern
BPM	Best practicable means
BS	British Standard
BTO	British Trust for Ornithology
CCG	South Eastern Hampshire Clinical Commissioning Group
CCI	Community Conservation Index
CCR	Climate Change Risk assessment
CD&E	Construction, Demolition & Excavation
CEA	Cumulative Effects Assessment
CEMP	Construction Environmental Management Plan - A plan by the contractor describing how the environmental impacts of construction activities of a project will be minimised and mitigated.
CFMPs	Catchment Flood Management Plans
CI	County Interest
CIEEM	Chartered Institute for Ecology and Environmental Management
CifA	Chartered Institute for Archaeologists
CIRIA	Construction Industry Research and Information Society
CIWEM	Chartered Institution of Water and Environmental Management
CLP	Classification, labelling and packaging
CMS	Continuous Monitoring Stations - An air quality monitoring station that houses analysers that continuously monitor the concentrations of air pollutants.
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide equivalent
COMAH	Control of Major Accident Hazards
Congestion Reference Flow	The maximum achievable hourly throughput of traffic on a particular stretch of road, expressed in terms of AADT.

Term/Acronym	Definition
Construction	Construction, also referred to as the construction phase, refers to the all activity on and offsite required to implement the proposed development. The construction phase is considered to commence with the first activity on site, for example the creation of site access or site clearance works, and ends with demobilisation.
Conservation Area	An area of special environmental or historic interest or importance, of which the character or appearance is protected by law against undesirable changes (Section 69 of the Planning (Listed Buildings and Conservation Areas) Act 1990).
COSHH	Control of Substances Hazardous to Health - Under the Control of Substances Hazardous to Health Regulations 2002, employers need to either prevent or reduce their workers' exposure to substances that are hazardous to their health.
Contaminated Land Report 11	The Model Procedures for the Management of Land Contamination (CLR 11) have been developed to provide the technical framework for applying a risk management process when dealing with land affected by contamination. The process involves identifying, making decisions on, and taking appropriate action to deal with land contamination in a way that is consistent with government policies and legislation within the UK.
County Wildlife Site (CWS)	A non-statutory conservation designation in the UK which affirms a site's importance and value for wildlife in its county context. The designation is classified by Natural England as being a 'Local Site' designation, though sites can also be of a regional and national importance.
CR	County rare
CRoW	Countryside and Rights of Way
CRTN	Calculation of Road Traffic Noise – Method of calculating (and measuring) road traffic noise levels for new and altered highways.
CS	County Scarce
CSM	Conceptual Site Model - Serves to conceptualize the relationship between contaminant sources and receptors through consideration of potential or actual migration and exposure pathways.
dB	Decibel
DCLG	Department for Communities and Local Government
DECC	Department for Energy and Climate Change
Defra	Department of the Environment, Food and Rural Affairs - Defra is the government department responsible for environmental protection, food production and standards, agriculture, fisheries and rural communities in the United Kingdom of Great Britain and Northern Ireland. Defra is a ministerial department, supported by 33 agencies and public bodies.
Demobilisation	This term refers to the completion and the removal of physical and manpower resources from a construction site at the completion of the construction phase.
Designated Landscape	Area(s) of land identified as being of importance at international, national or local levels, either defined by statute or identified in development plan or other documents.
Development	Any proposal that results in a change to the landscape and / or visual environment.
DfT	Department for Transport - Government department responsible for the transport network in England, and for aspects of the transport network in the devolved administrations.
Disasters	A sudden accident or a natural catastrophe that causes great damage or loss of life.
DM	'Do Minimum'

Term/Acronym	Definition
DMRB	Design Manual for Roads and Bridges - A series of 15 volumes that provide standards, advice notes and other published documents relating to the design, assessment and operation of trunk roads, including motorways in the United Kingdom, and, with some amendments, the Republic of Ireland.
DOC	Dissolved Organic Carbon
DQRA	Detailed quantitative risk assessment
DS	'Do Something'
EA	Environment Agency - A non-departmental public body with responsibilities relating to the protection and enhancement of the environment in England.
EAR	Environmental Assessment Report
EAST	Early Assessment and Sifting Tool - A decision support tool that has been developed to quickly summarise and present evidence on options in a clear and consistent format. It provides decision makers with relevant, high level, information to help them form an early view of how options perform and compare. The tool itself does not make recommendations and is not intended to be used for making final funding decisions.
EC	European Community
EclA	Ecological Impact Assessment
ECOW	Ecological Clerk of Works
EEA	European Economic Area
EHDC	East Hampshire District Council
EIA	Environmental Impact Assessment
EMMP	Ecological Mitigation and Management Plan
EMP	Environmental Management Plan
English Heritage	Charity that cares for the National Heritage Collection of state owned historic sites and monuments across England, under licence from Historic England.
EPSM	European Protected Species Mitigation licences
EQS	Environmental Quality Standards
ES	Environmental Statement
ESR	Environmental Study Report
EU	European Union
EZol	Ecological Zone of Influence - the area in which there may be ecological features subject to impacts and subsequent effects as a result of the Scheme, including those that would occur as a result of habitat loss, and those that would occur through disturbance, such as noise.
Extreme weather	A weather event that falls outside the realm of normal weather patterns.
Effect	The nature of the change(s) likely to occur as a result of a particular impact.
Direct effect	An effect that is directly attributable to the Scheme
Indirect effect	An effect that results from the Scheme as a consequence of a direct effect(s), often occurring away from the site, or as a result of a sequence of interrelationships or a complex pathway.
Element	Individual parts which make up the landscape, for example trees, hedgerows or buildings.
Enabling works	Enabling works cover those activities and preparations required to make a site construction ready and include the creation of access routes, and

Term/Acronym	Definition
	installation of security fencing, hoarding, signage and site compound(s). Enabling works are considered to occur during the construction phase.
Enhancement	Measures that seek to improve the landscape of the site and / or its wider setting beyond its baseline condition.
eDNA	environmental DNA
FE	Forestry England
Feature	Prominent or eye-catching elements in the landscape, such as wooded skylines, parkland trees, church spires, or a particular aspect of the proposed development.
FRA	Flood Risk Assessment
GAC	Generic Assessment Criteria
GCS	Good Chemical Status
GEP	Good Ecological Potential
GES	Good Ecological Status
GHG	Greenhouse Gas
GI	Ground Investigation
GLVIA	Guidelines for Landscape and Visual Impact Assessment
GPA12	GPA12 Statements of Significance: Analysing Significance in Heritage Assets. Good Practice Advice Note 12 (GPA12) (2019)
GPP	Guidance for Pollution Prevention
GQRA	Generic quantitative risk assessments
H++	The results of a project to investigate the development of plausible high end climate change scenarios
HBC	Havant Borough Council
HBIC	Hampshire Biodiversity Information Centre
HCC	Hampshire County Council
HDV	Heavy Duty Vehicles/Heavy Delivery Vehicles
HE	Highways England
HER	Historic Environment Record
HGVs	Heavy Good Vehicles
HIA	Health Impact Assessment
Historic England	Publicly funded body that champions and protects England's historic places; also known as the Historic Buildings and Monuments Commission for England.
HLC	Historic Landscape Character
HLCA	Historic Landscape Character Area
HMC	Habitat Modification Classification
HMS	Habitat Modification Scores
HMWB	Heavily Modified Waterbodies
HPI	Habitats of Principal Importance - Under Section 41 of the Natural Environment and Rural Communities (NERC) Act, the Secretary of State is required to publish a list of habitats which are of principal importance for the conservation of biodiversity in England. Fifty-six habitats of principal importance are included on the S41 list. These are all the habitats in England that were identified as requiring action in the UK Biodiversity

Term/Acrronym	Definition
	Action Plan and continue to be regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework.
HRA	Habitats Regulation Assessment
HSI	Habitat Suitability Index
ICCI	In-combination Climate Change Impacts assessment
IDB	Internal Drainage Board
IEFs	Important Ecological Features
IEMA	Institute of Environmental Management and Assessment
INNPS	Invasive non-native plant species
IUCN Red List of Threatened Species	International Union for Conservation of Nature's Red List
IUCN_EN_2014:EN	World Conservation Union 2014 (England) - Endangered
IUCN_GB_pre94:NR	World Conservation Union pre 1994 (Great Britain) - Nationally Rare
IUCN_GB_2001:VU	World Conservation Union 2001 (Great Britain) - Vulnerable
JNCC	Joint Nature Conservation Committee
km	Kilometre
km ²	Square Kilometre
Land cover	This term relates to the surface cover of the land and is usually expressed in terms of vegetation cover or lack thereof.
Land use	This term refers to what land is used for and is based on broad categories such as urban, industrial, agriculture or forestry.
Landform	The shape and form of the land surface resulting from combinations of geology, geomorphology, slope, elevation and physical processes.
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 Area (LCA)	Single unique areas which are discreet geographical areas of a particular landscape type.
Landscape Character Assessment	The process of identifying and describing variation in the character of the landscape and using this information to assist in managing change in the landscape.
Landscape Character Type (LCT)	Distinct types of landscape that are relatively homogenous in character. They are generic in nature in that they may occur in different parts of the country, but wherever they occur they share broadly similar combinations of geology, topography, drainage patterns, vegetation and historical land use and settlement pattern, and perceptual and aesthetic attributes.
Landscape quality / condition	A measure of the physical state of the landscape. It may include the extent to which the character typical of the area is represented in individual locations, the intactness of the landscape and the condition of individual elements.
Landscape receptor	The constituent features and elements of the landscape, its specific or perceptual qualities and its character considered in relation to the proposed development.
Landscape resource	This term refers to the character and all features, elements and qualities of the landscape, which is defined by the European Landscape Convention (ELC) as follows: "Landscape is an area, as perceived by people, whose character is the result of the action and interaction of natural and / or human factors" (Council of Europe, 2000). The landscape resource concerns all types of landscape within the study area and covers "natural, rural, urban and peri-urban areas. It includes land, inland water and marine areas. It concerns landscapes that might be considered

Term/Acronym	Definition
	outstanding as well as everyday or degrade landscapes” (Article 2 of the ELC, Council of Europe, 2000).
(The) Landscape scheme	The landscape design for the proposed development, incorporating all landscape mitigation and enhancement measures.
Landscape value	The relative value that is attached to landscapes by society, which may vary depending on the nature of the stakeholder.
LVIA	Landscape and Visual Impact Assessment
LAQM.TG	Local Air Quality Management Technical Guidance - A technical guidance document designed to support local authorities in carrying out their duties under the Environment Act 1995 and subsequent Regulations. These duties require local authorities to review and assess air quality in their area from time to time.
LDV	Light delivery vehicle
LED	Light emitting diode
LEP	Local Enterprise Partnership
LGS	Local Geographical Site
LHA	Local Highway Authority
LIFE	Lotic invertebrate Index for Flow Evaluation
Limit Values	Refers to airborne concentrations of chemical substances and represent conditions under which it is believed that nearly all workers may be repeatedly exposed, day after day, over a working lifetime, without adverse health effects.
LLFAs	Lead Local Flood Authorities
LNR	Local Nature Reserve - A statutory designation made under Section 21 of the National Parks and Access to the Countryside Act 1949. and amended by Schedule 11 of the Natural Environment and Rural Communities Act 2006, by principal local authorities. A Local Nature Reserve must be of importance for wildlife, geology, education or public enjoyment.
LOAEL	Lowest Observed Adverse Effect Level
Local Enterprise	A voluntary partnership set up between local authorities and businesses to drive local economic growth and job creation activities. There are 39 LEPs across England.
Local Geological Site	Are non-statutory sites that have been identified by local geoconservation groups as being of importance.
LPA	Local Planning Authority
LTP	The Hampshire Local Transport Plan 2011-2031
LWS	Local Wildlife Site
MAFF	Ministry of Agriculture, Fisheries and Food - A UK government department created by the Board of Agriculture Act 1889. The Ministry was dissolved in 2002, at which point its responsibilities were merged into the Department for Environment, Food and Rural Affairs (Defra).
Magnitude of change	A judgement regarding the size and scale of the change, the geographical extent of the area that would be affected and the duration of the effect and its reversibility.

Term/Acronym	Definition
MAGIC	Multi-Agency Geographic Information for the Countryside - A web-based interactive map to bring together information on key environmental schemes and designations in one place. Multi Agency Geographic Information for the Countryside (MAGIC) is a partnership project involving six government organisations who have responsibilities for rural policy-making and management.
Mineral Consultation Area	An area identified in order to ensure consultation between the relevant minerals planning authority, the minerals industry and others before certain non-mineral planning applications made within the area are determined.
Mineral Safeguarding Area	An area designated by Minerals Planning Authorities which covers known deposits of minerals which are desired to be kept safeguarded from unnecessary sterilisation by non-mineral development.
Ministry of Defence	Government department responsible for the defence of the UK and its overseas territories, including the maintenance of the armed forces.
MIS-index	Monitoring Intermittent Streams index survey method
Mitigation	This term refers to those measures that are proposed to prevent / avoid, reduce and where possible offset any adverse effects.
MOU	Measure of Uncertainty
MoRPh	Modular River Physical Survey
MMP	Materials Management Plan
MT	Motorised Travellers - A person who travels by a motorised vehicle which is a vehicle that is fitted with an engine or a motor e.g. mobility scooter.
Multi-Agency Geographic Information for the Countryside	Multi-Agency Geographic Information for the Countryside - A web-based interactive map to bring together information on key environmental schemes and designations in one place. Multi Agency Geographic Information for the Countryside (MAGIC) is a partnership project involving six government organisations who have responsibilities for rural policy-making and management.
MSOA	Middle Layer Super Output Area
National Infrastructure Plan	Document published by the UK Government, setting out its strategy for meeting the infrastructure needs of the UK economy.
National Trust	Charity that cares for historic houses, gardens, ancient monuments, countryside and other sites across England, Wales and Northern Ireland, including the Stonehenge landscape.
National Vegetation Classification	The National Vegetation Classification was commissioned in 1975 by the Nature Conservancy Council (NCC) to provide a comprehensive and systematic catalogue and description of the plant communities of Britain. It has now been accepted as a standard, not only by the nature conservation and countryside organisations, but also by forestry, agriculture and water agencies, local authorities, nongovernmental organisations, major industries and universities.
NBN	National Biodiversity Network Atlas
NCA	National Character Area - The subdivision of England into 159 distinct natural areas. Each area is defined by a unique combination of landscape, biodiversity, geodiversity, history, and cultural and economic activity. Their boundaries follow natural lines in the landscape rather than administrative boundaries.
NCNR	National Cycle Network Route
NE	Natural England - Executive non-departmental public body responsible for the natural environment.
NERC	Natural Environment and Rural Communities Act 2006

Term/Acronym	Definition
NHLE	National Heritage List for England
nHR	North Hampshire Rare
nHS	North Hampshire Scarce
NIA	Noise Important Area - Areas where the 1% of the population that are affected by the highest noise levels from major roads are located according to the results of Defra's strategic noise maps.
NIEA	Northern Ireland Environment Agency
NMU	Non-Motorised User - Cyclists, pedestrians (including wheelchair users), and equestrians using the public highway.
NN	Nationally Notable
NNR	National Nature Reserves - Reserves established to protect some of the most important habitats, species and geology in the United Kingdom, and to provide 'outdoor laboratories' for research. There are currently 224 NNRs in England with a total area of over 94,400 hectares - approximately 0.7% of the country's land surface. Natural England manages about two thirds of England's NNRs. The remaining reserves are managed by organisations approved by Natural England, for example, the National Trust, Forestry Commission, RSPB, Wildlife Trusts and local authorities.
NO ₂	Nitrogen Dioxide
NOEL	No Observed Effect Level
NO _x	Nitrogen Oxide
NPPF	National Planning Policy Framework
NPPG	National Planning Practice Guidance
NPSE	Noise Policy Statement for England
NTL	Nominal Tidal Limit
NRW	Natural Resources Wales
NS	Nationally Scarce
NSIP	Nationally Significant Infrastructure Project
°C	Degrees Celsius
OEMP	Outline Environmental Management Plan
ONS	Office for National Statistics
Open Access Land	Land where the public have access either by legal right or informal agreement, within which certain activities may be restricted.
Operation	Also referred to as completion, this term describes the operation phase of the completed development and is considered to commence at the end of the construction phase, after demobilisation. The duration of the operation phase is dependent on the nature of the proposed development.
OSGR	Ordnance Survey Grid Reference
OSNGR	Ordnance Survey National Grid Reference
Outstanding Universal Value	To be included on the UNESCO World Heritage List, sites must be deemed to be of 'outstanding universal value'.
PAHs	Polycyclic Aromatic Hydrocarbons
Parameters	A limit or boundary which defines the scope of a particular process or activity.
PAWS	Plantations on Ancient Woodland Sites
PCL	Potential Contaminant Linkages

Term/Acronym	Definition
PCM	Pollution Climate Mapping - A collection of models designed to fulfil part of the United Kingdom's EU Directive (2008/50/EC) on ambient air quality and cleaner air for Europe, requirements to report on the concentrations of particular pollutants in the atmosphere. There is one model per pollutant, each with two parts: a base year model and a projections model. The Pollution Climate Mapping model provides outputs on a 1x1 km grid of background conditions plus around 9,000 representative road side values. The Mapping is also used for scenario assessment and population exposure calculations to assist policy developments and provides model runs to support the writing of Time Extension Notification applications for PM10 and NOx.
PCSM	Preliminary Conceptual Site Model
PEIR	Preliminary Environmental Information Report
Perception / perceptible	A term used to describe the sensory (i.e. received through human senses) with the cognitive (i.e. knowledge and understanding gained from many sources and experiences).
Permissive Paths	A path over which there is no formal right of access (i.e. not a public right of way) whose use by the public is allowed by the landowner.
PINS	Planning Inspectorate
PM ₁₀	Particulate Matter with a diameter of 10 micrometres or less
PM ₂₅	Particulate Matter with a diameter of 25 micrometres or less
PNEC	Probable Non-effect Concentration
PPE	Personal Protective Equipment
PPGs	Pollution Prevention Guidelines
PPV	Peak particle velocity
PRoW	Public Right of Way - A way over which the public have a right to pass and repass. The route may be used on foot, on (or leading) a horse, on a pedal cycle or with a motor vehicle, depending on its status. Although the land may be owned by a private individual, the public may still gain access across that land along a specific route. Public rights of way are all highways in law.
PSCL	Planning Solutions Consulting Limited (PSCL)
PSI	Proportion of Sediment-sensitive Invertebrates
PSSR	Preliminary Sources Study Report
RAG	Red Amber Green
RAMS	Risk Assessment, Method Statement
Ramsar Sites	Wetlands of International Importance
RBD	River Basin District (RBD)
RBMPs	River Basin Management Plans
RCP	Representative Concentration Pathway
REAC	Record of Environmental Actions and Commitments
Receptor	See 'Landscape Receptor' and 'Visual Receptor'.
RHS	River Habitat Surveys
RIG	Regionally Important Geological (site)
RIVPACS	River Invertebrate Prediction and Classification System
RNAG	Reasons for Not Achieving Good

Term/Acronym	Definition
RSPB	Royal Society for the Protection of Birds A charitable organisation that works to promote conservation and protection of birds and the wider environment through public awareness campaigns, petitions and through the operation of nature reserves throughout the UK.
RSTs	Runoff Specific Thresholds (RSTs)
(c) SAC	(Candidate) Special Area of Conservation - Areas of strictly protected sites designated under the EC Habitats Directive (92/43/EEC) on the conservation of natural habitats and of wild fauna and flora. The listed habitat types and species are those considered to be most in need of conservation at a European level (excluding birds).
SBI	Site of Borough Importance
Scheduled monument	A 'nationally important' archaeological site or historic building, given protection against unauthorised change and included in the Schedule of Monuments kept by the Secretary of State for Culture, Media and Sport. The protection given to scheduled monuments is given under the Ancient Monuments and Archaeological Areas Act 1979.
SCI	Statement of Community Involvement
SCP	Staunton Country Park
SDNPA	South Downs National Park Authority
SDMP	Solent Disturbance and Mitigation Project
Sensitivity (of a receptor)	A judgement regarding the susceptibility of a receptor to the change arising as a result of the proposed development and the value attached to the receptor.
SEPA	Scottish Environment Protection Agency
Significance of effect	The level or importance of landscape and visual effects, determined by considering together sequentially the sensitivity of the receptor with the magnitude of effect.
SLI	Shoulder of Mutton Wood Site of Local Importance
SINC	Sites of Importance for Nature Conservation - Locally important sites of nature conservation adopted by local authorities for planning purposes.
SOAEL	Significant Observed Adverse Effect Level
SoS	Secretary of State
SPA	Special Protection Area - Areas of strictly protected sites classified in accordance with Article 4 of the EC Birds Directive (2009/147/EC) on the conservation of wild birds. They are classified for rare and vulnerable birds (as listed on Annex I of the Directive), and for regularly occurring migratory species.
(p)SPA	(potential) Special Protection Area
SPI	Species of Principal Importance
SPZ	Source Protection Zone - Areas of land around over 2000 groundwater sources such as wells, boreholes and springs used for public drinking water supply. The zones show the risk of contamination from any activities that might cause pollution in the area. The closer the activity, the greater the risk. There are three main zones (inner, outer and total catchment) and a fourth zone of special interest, which is occasionally applied to a groundwater source. The zones are used in conjunction with the Groundwater Protection Policy to set up pollution prevention measures in areas which are at a higher risk, and to monitor the activities of potential polluters nearby.

Term/Acronym	Definition
SSSI	Site of Special Scientific Interest - A conservation designation denoting to a protected area in the United Kingdom. The Sites are protected by law to conserve their wildlife or geology.
Stakeholder	The whole constituency of individuals and groups who have an interest in a subject, place or landscape.
Study area	The area within which it is considered that changes arising as a result of the proposed development would result in the highest and / or most important direct or indirect effects.
Strategic Road Network	The network of approximately 4,300 miles of motorways and major 'trunk' A roads across England, managed by Highways England.
SuDS	Sustainable Urban Drainage Systems
SUP	Shared use path
SWMP	Site Waste Management Plan - A Site Waste Management Plan should describe how materials will be managed efficiently and disposed of legally during the construction of the works, explaining how the re-use and recycling of materials will be maximised. This involves estimating how much of each type of waste is likely to be produced and the proportion of this that will be re-used or recycled on site, or removed from the construction site for re-use, recycling, recovery or disposal. It is the joint responsibility of the client and the principal contractor to ensure that a Site Waste Management Plan is in place before construction begins and to ensure that it is enforced.
SxBRC	Sussex Biodiversity Record Centre
TIN	Technical Information Note
Topography	Local detail or specific features of landform.
TA	Transport Assessment
TAG	Transport Analysis Guidance
TP	Travel Plan
TPA	Tonnes per Annum
Tranquil / tranquillity	A state of calm and quietude associated with peace and considered to be an important asset of landscape.
Tree Preservation Order (TPO)	A Tree Preservation Order is made by a Local Planning Authority to protect specific trees or a particular area, group or woodland to protect specific trees or a particular area, group or woodland from deliberate damage and destruction. TPOs can prevent the felling, lopping, topping, uprooting or otherwise wilful damaging of trees without the permission of the Local Planning Authority.
TS	Transport Statement
UAEL	Unacceptable Adverse Effect Levels
UK	United Kingdom
UKCP18	United Kingdom Climate Projections (2018)
UXO	Unexploded Ordnance - An explosive weapon (bombs, shells, grenades, land mines, naval mines, cluster munition, etc.) that did not explode when they were employed and still pose a risk of detonation, sometimes many decades after they were used or discarded.
Viewpoint	The location from which photographs that describe specific or representative views toward the proposed development are captured.
Visual amenity	The overall pleasantness of the views people enjoy of their surroundings, which provides the setting or backdrop for the enjoyment of peoples activities.

Term/Acronym	Definition
Visual envelope	The approximate geographical area(s) from within which full or partial views of the proposed development would be possible.
Visual receptor	Individuals and / or defined groups of people who have the potential to be affected by the proposed development.
WEEE	Waste electrical and electronic equipment
WFD	Water Framework Directive - The Water Framework Directive (2000/60/EC) is a EU directive which aims to achieve good (2000/60/EC) is a EU directive which aims to achieve good status of all water bodies (surface waters, groundwaters and the sites that depend on them, estuaries and near-shore coastal waters) and the prevent any deterioration. It has introduced a comprehensive river basin management planning system to protect and improve the ecological quality of the water environment. It is underpinned by the use of environmental standards.
WHO	World Health Organisation
WHPT	Whalley Hawkes Paisley Trigg
WMO	World Meteorological Organisation
World Heritage Site	A site listed by UNESCO because of its special natural or cultural value.
Worst case	Reasonable prediction of the scenario that would result in the highest level of effect(s).
WPZ	Water Protection Zone
WQ	Water Quality
WRAP	Waste and Resources Action Plan
WRMP	Water Resources Management Plan
WRSE	Water Resources in the South East
Vulnerability	The quality or state of being exposed to the possibility of being attacked or harmed, either physically or emotionally.
ZOI	Zone of Influence
Zone of Theoretical Visibility	A map, usually digitally produced, showing areas of land within which, a development is theoretically visible.
ZVI	Zone of Visual Influence



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