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EET Fuels

Stanlow Hydrogen Ready Combined Heat and Power Project Development Consent Order

**Environmental Impact Assessment Scoping Report –
Volume 3, Appendices**

02-09-2026

Document ref: 2026UK550445-ENV-001



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Abbreviations

Acronym	Definition
%	Percent
°C	Degrees Celsius
AADT	Annual Average Daily Traffic
ADMS	Atmospheric Dispersion Modelling System
AEP	Annual Exceedance Probability
AIL	Abnormal Indivisible Loads
ALARP	As Low As Reasonably Practicable
AOD	Above Ordinance Datum
AONB	Area of Outstanding Natural Beauty
APIS	Air Pollution Information System
AQAL	Air Quality Assessment Level
AQMA	Air Quality Management Area
AQS	Air Quality Standard
ASLEV	Area of Significant Local Environmental Value
ATC	Automatic Traffic Counts
AV	All Vehicles
AW	Ancient woodland
AWI	Ancient Woodland Inventory
BAT	Best Available Technique
BGL	Below Ground Level
BGS	British Geological Survey
BMV	Best and Most Versatile
BNG	Biodiversity Net Gain
BoCC	Birds of Conservation Concern
BRIG	Biodiversity Reporting and Information Group
BS EN	British Standard European Norm
BSI	British Standards Institution

Acronym	Definition
BTO	British Trust for Ornithology
CA	Conservation Area
CBRN	Chemical, Biological, Radiological and Nuclear
CCGT	Combined Cycle Gas Turbine
CD4	Crude Distillation Unit 4
CDM	Construction Design Management
CDOIF	Chemicals and Downstream Oil Industries Forum
CEH	Centre for Ecology and Hydrology
CFA Plant	Chlorofluoroaniline Plant
CHP	Combined Heat and Power
CIEEM	Chartered Institute of Ecology and Environmental Management
CIfA	Chartered Institute for Archaeologists
CIRIA	Construction Industry Research and Information Association
CJEU	Court of Justice of the European Union
CL:AIRE	Contaminated Land: Applications In Real Environments
CME	Coronal mass ejections
CMLI	Chartered Members of the Landscape Institute
CO ₂ e	Carbon dioxide equivalent
CoCP	Code of Construction Practice
COMAH	Control Of Major Accident Hazards
COPD	Chronic Obstructive Pulmonary Disease
CRI	Climate Risk Indicator
CSM	Conceptual Site Model
CTMP	Construction Traffic Management Plan
CWCC	Cheshire West and Chester Council
CWTP	Construction Worker Travel Plan
CZ	Consultation Zone
dB	Decibel
DBW	Daytime Bat Walkover
DCO	Development Consent Order

Acronym	Definition
Defra	Department for Environment, Food and Rural Affairs
DLUHC	Department for Levelling Up, Housing and Communities
DMRB	Design Manual for Roads and Bridges
DNS	Developments of National Significance
DSM	Digital Surface Model
DTM	Digital Terrain Model
EA	Environment Agency
EATM	Environmental Assessment of Traffic and Movement
EC	European Commission
EclA	Ecological Impact Assessment
EEA	European Economic Area
EET	Essar Energy Transition
EIA	Environmental Impact Assessment
EIA Regulations	Infrastructure Planning (Environmental Impact Assessment) Regulations 2017)
EATM	Environmental Assessment of Traffic and Movement
EPS	European Protected Species
EPUK	Environmental Protection UK
ES	Environmental Statement
EU	European Union
FCC	Fluid Catalytic Cracking
FEH	Flood Estimation Handbook
FGL	Finished Ground Level
FLL	Functionally Linked Land
FP	Footpath
FRA	Flood Risk Assessment
FRAP	Flood Risk Activities Permit
GB	Great Britain
GCN	Great crested newt
GHG	Greenhouse Gas

Acronym	Definition
GLTA	Ground Level tree Assessment
GLVIA	Guidelines for Landscape and Visual Impact Assessment
GLVIA3	Guidelines for Landscape and Visual Impact Assessment Third edition
GPA	Good Practice Advice
GPS	Global Positioning System
GT	Gas Turbine
GWDTE	Groundwater Dependant Terrestrial Ecosystems
H&S	Health and safety
H ₂	Hydrogen
ha	Hectare
HCA	Homes and Communities Agency
HDV	Heavy Duty Vehicle
HER	Historic Environment Records
HGV	Heavy Goods Vehicle
HPI	Habitats of Principal Importance
HPP	Hydrogen Production Plant
HPP1	Hydrogen Production Plant 1
HRA	Habitat Regulations Assessment
HRSA	Habitats Regulations Screening Assessment
HRSG	Heat Recovery Steam Generator
HS	Heritage Statement
HSE	Health and Safety Executive
HSI	Habitat Suitability Index
HV	Heavy Vehicle
IAQM	Institute of Air Quality Management
IAS	Invasive Alien Species
ICCI	In-combination Climate Impacts
IEF	Important Ecological Feature
IEMA	Institute of Environmental Management and Assessment
IMD	Indices of Multiple Deprivation

Acronym	Definition
INNS	Invasive Non-Native Species
IROPI	Imperative reasons of overriding public interest
IRZ	Impact Risk Zone
ISEP	Institute of Sustainability and Environmental Professionals
ISO	International Organization for Standardisation
JNCC	Joint Nature Conservation Committee
JTC	Junction Turning Counts
km	Kilometres
ktCO ₂ e	Kilo tonnes of carbon dioxide equivalent
LCA	Landscape Character Assessment
LCRM	Land Contamination Risk Management
LCT	Local Landscape Type
LDV	Light Duty Vehicle
LER	Local Electrical Room
LERC	Local Environmental Records Centre
LES	Low Emission Strategy
LHA	Local Highways Authority
LI	Landscape Institute
LNAPL	Light Nonaqueous Phase Liquid
LNR	Local Nature Reserve
LPA	Local Planning Authority
LPG	Liquid Petroleum Gas
LSE	Likely Significant Effect
LSOA	Lower Super Output Areas
LWS	Local Wildlife Site
MA&D	Major Accidents and Disasters
MAGIC	Multi-Agency Geographic Information for the Countryside
MAH	Major Accident Hazard
MEPH	Mechanical, Electrical, Plumbing and Heating
MHCLG	Ministry of Housing, Communities and Local Government

Acronym	Definition
mm	millimetre
Mm ²	Million square metres
Mm ³	Million cubic metres
MMP	Materials Management Plan
MPH	Miles-per-hour
Mt	Million tonnes
MtCO ₂ e	Million tonnes of carbon dioxide equivalent
MW	Megawatt
NAPL	Nonaqueous Phase Liquid
NCA	National Character Area
NCN	National Cycle Network
NE	Natural England
NECR	Natural England Commissioned Report
NH ₃	Ammonia
NHLE	National Heritage List for England
NIA	Noise Important Area
NMA	Non-Material Amendment
NM ³ /h	Normal Cubic Meters per Hour
NMU	Non-Motorised User
NNR	National Nature Reserve
NOC	National Oceanography Centre
NO ₂	Nitrogen dioxide
NO _x	Nitrogen oxides
NPPF	National Planning Policy Framework
NPPG	National Planning Practice Guidance
NPS	National Policy Statement
NRMM	Non-Road Mobile Machinery
NRW	Natural Resources Wales
NSIP	Nationally Significant Infrastructure Project
NSR	Noise Sensitive Receptor

Acronym	Definition
NVQ	National Vocational Qualification
NWAWP	North West Aggregates Working Party
O&M	Operation and Maintenance
O/S	Off-side
OMHPDL	Open Mosaic Habitat on Previously Developed Land
ONR	Office for Nuclear Regulation
Opp.	Opposite
OS	Ordnance Survey
OSPAR	Oslo and Paris Conventions
PAS	Publicly Available Standard
PC	Process Contribution
PAH	Polycyclic Aromatic Hydrocarbons
PCE	Perchloroethylene
PEA	Preliminary Ecological Appraisal
PEC	Predicted Environmental Concentration
PFAS	Per- And Polyfluoroalkyl Substances
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctane Sulfonic Acid
PIC	Personal Injury Collision
PINS	Planning Inspectorate
PM ₁₀	Particulate Matter 10 microns in diameter
PM _{2.5}	Particulate Matter 2.5 microns in diameter
PRF	Potential Roost Feature
PPE	Personal Protective Equipment
PPG	Planning Practice Guidance
PPV	Peak Particle Velocity
PBRA	Preliminary Bat Roost Assessment
PRA	In relation to Biodiversity, Preliminary Roost Assessment
PRA	In relation to Ground Conditions, Preliminary Risk Assessment
PRF	Potential Roosting Feature

Acronym	Definition
PRoW	Public Rights of Way
pSACs	possible/proposed Special Area of Conservations
pSPAs	potential Special Protection Areas
PSZ	Public Safety Zone
PWRA	Piling Works Risk Assessment
RBMP	River Basin Management Plan
RCP	Representative Concentration Pathway
REAC	Register of Environmental Actions and Commitments
RIAA	Report to Inform Appropriate Assessment
RICS	Royal Institution of Chartered Surveyors
RIS	Ramsar Information Sheet
RPE	Respiratory Protective Equipment
RQF	Registered Qualification Framework
SAC	Special Area of Conservation
SDF	Standard Data Form
SFRA	Strategic Flood Risk Assessment
SMC	Stanlow Manufacturing Complex
SO ₂	Sulphur dioxide
SVOCs	Semi-Volatile Organic Compounds
SPA	Special Protection Area
SPMP	Site Protection Monitoring Plan
SPZ	Source Protection Zone
SRN	Strategic Road Network
SSSI	Site Of Special Scientific Interest
SuDS	Sustainable Drainage Systems
TA	Transport Assessment
tCO ₂ e	Tonnes of carbon dioxide equivalent
TCPA	Town And Country Planning Act
TGN	Technical Guidance Note
TP	Travel Plan

Acronym	Definition
UK	United Kingdom
UK BAP	United Kingdom Biodiversity Action Plan
UKCP18	UK Climate Projections 2018
UKHab	UK Habitat
UST	Underground Storage Tank
UXO	Unexploded Ordnance
V/C Ratio	Volume/Highway Capacity Ratio
VEH	Vectored Exception Handling
VIA	Visual Impact Assessment
VOCs	Volatile Organic Compounds
WBGT	Wet Bulb Globe Temperature
WCH	Walkers, Cyclists and Horse-riders
WFD	Water Framework Directive
WSP	WSP UK Ltd
WWTW	Waste Water Treatment Works
ZoI	Zone of Influence
ZTV	Zone of Theoretical Visibility

Glossary

Term	Definition
Above Ground Installation	Infrastructure located above ground and associated with pipeline or utility systems, such as connection points, control equipment or ancillary plant.
(Major) Accident	In the context of the Proposed Development, an event that threatens immediate or delayed serious damage to human health, welfare and/or the environment and requires the use of resources beyond those of the Applicant or their Appointed Contractor(s) to respond. Serious damage includes the loss of life or permanent injury, and/or permanent or long-lasting damage to a receptor that cannot be restored through minor clean-up and restoration efforts. The significance of this effect will be considered in terms of the extent, severity and duration of harm and the sensitivity of the receptor.
Abnormal Indivisible Loads	Loads that cannot be divided into smaller units for transport by road without disproportionate effort or cost and therefore require specialist vehicles, routing and approvals.
Above Ordnance Datum	A reference point used in the UK for measuring elevations. It is based on the mean sea level at Newlyn in Cornwall. Heights above this datum are used in mapping and construction to ensure consistency and accuracy in elevation measurements.
Acoustic Enclosures	Structures designed to contain and reduce noise from specific sources, such as machinery or equipment.
Acoustic Features	Characteristics of a sound that may attract attention, such as tonality, impulsivity, and intermittency.
Acoustic Screening	Barriers or other structures used to reduce noise levels by blocking or absorbing sound.
Active Travel	Forms of travel involving physical activity, including walking and cycling.
Adaptive Capacity	The capacity of receptors to adjust to potential damage, to take advantage of opportunities, or to respond to consequences.
Adverse Effects	Negative impacts on the environment or socio-economic conditions.
Air Quality Management Area	Areas designated by local authorities where air quality does not meet national standards and requires improvement.

Term	Definition
Air Quality Standards	Regulatory limits on the concentration of pollutants in the air to protect human health and the environment.
ALARP	"ALARP" stands for "as low as reasonably practicable". Reasonably practicable involves weighing a risk against the trouble, time and money needed to control it. Thus, ALARP describes the level to which the Health & Safety Executive (HSE) expect to see workplace risks controlled.
Annual Average Daily Traffic	The total volume of vehicle traffic on a road over a year divided by 365 days, expressed as vehicles per day.
Annual Exceedance Probability	The probability of a flood event occurring in any given year, expressed as a percentage or ratio (for example, 1% AEP equals a 1 in 100 chance in any year).
Application Reference	The planning or development consent reference number used to identify an application.
Appropriate Assessment	The detailed stage of HRA undertaken where likely significant effects cannot be ruled out, to determine whether the project would adversely affect the integrity of a relevant site.
Aquifer	A body of rock or superficial deposit that can store and transmit groundwater.
Archaeological Remains	Physical evidence of past human activity, including buildings, structures, artifacts, and landscapes.
Associated Development	Works or infrastructure linked to, and required to support, a main Proposed Development.
Atmospheric Dispersion Modelling System	A software tool used to model the dispersion of air pollutants in the atmosphere.
Automatic Traffic Counts	Traffic surveys using automated equipment to record vehicle flows, classifications and speeds over a defined monitoring period.
Avoided emissions	Reductions in greenhouse gas emissions achieved by implementing more sustainable practices or technologies.
Awaiting Decision	A planning application status indicating that a decision has not yet been issued by the relevant authority.
A-weighting, dB(A)	The unit of sound level, weighted according to the A-scale, which takes into account the increased sensitivity of the human ear at some frequencies.
Baseline conditions	The existing environmental state against which the effects of a development are assessed.

Term	Definition
Baseline data	Information on the existing conditions in an area, used as a reference point for assessing the impacts of a Proposed Development.
Biodiversity	The biological diversity of the Earth's living resources. The total range of variability among systems and organisms at the following levels of organisation: bioregional, landscape, ecosystem, habitats, communities, species, populations, individuals, genes, and the structural and functional relationships within and between these different levels.
Biodiversity Net Gain (BNG) Assessment	A BNG Assessment compares baseline conditions to post-development plans. BNG is achieved if the post-development plans provide an increase of measured biodiversity value by at least 10% of the baseline value.
Bedrock	Natural solid rock often beneath loose deposits.
Below ground level	Below the level of the ground.
Best Available Technology	The most effective and advanced stage in the development of activities and their methods of operation, which indicate the practical suitability of particular techniques for providing the basis for emission limit values, and other equipment design criteria.
Birds Directive (2009/147/EC)	European legislation that seeks to conserve all naturally occurring wild bird species and their habitats, including through the designation of Special Protection Areas (SPAs) and the requirement to protect and maintain bird populations.
BS ISO 9613 (2024)	An international standard for the attenuation of sound during propagation outdoors, providing a general method of calculation.
BS4142:2014+A1:2019	A British Standard for rating and assessing industrial and commercial sound, used to determine the impact of noise on nearby receptors.
BS5228-1:2009+A1:2014	A code of practice for noise and vibration control on construction and open sites, providing guidance on measuring and mitigating noise impacts.
BS5228-2:2009+A1:2014	A code of practice for noise and vibration control on construction and open sites, providing guidance on measuring and mitigating vibration impacts.
BS7445:2003	A standard for the description and measurement of environmental noise.
Carbon	For the purposes of this document, the term used to describe anthropogenic emissions of carbon dioxide into the Earth's atmosphere that are linked to climate change.

Term	Definition
Carbon Capture and Storage	The process of capturing carbon dioxide emissions and transporting them for storage, typically in suitable geological formations.
Carbon budget	Limits set on the total amount of greenhouse gas emissions that can be emitted over a specific period to meet climate change legislative targets.
Carbon dioxide equivalent	A metric for expressing the impact of all greenhouse gases on a carbon dioxide basis.
Carbon management	The process of measuring, reducing, and managing carbon emissions from activities, products, or services.
Carbon reduction hierarchy	A framework for prioritizing actions to reduce carbon emissions, typically including steps like avoid, switch, and improve.
Carbon sequestration	The process of capturing and storing atmospheric carbon dioxide, typically in plants, soil, or geological formations.
Catchment	The area from which rainfall and runoff drain to a particular watercourse or point.
Chartered Institute for Archaeologists	The leading professional body representing archaeologists working in the UK and overseas.
Circular economy	Maximising the sustainable use and value of resources, eliminating waste from all stages of the resource lifecycle, while benefiting both the economy and the environment.
CIRIA C552	Construction Industry Research and Information Association, Publication C552 Contaminated land risk assessment - a guide to good practice. Sets the context of the risk assessment process within an overall risk management approach. It describes the stages involved in identifying risks and assessing their significance but stops short of describing remedial actions that might be taken to manage the risks.
Climate Change Allowances	Nationally published increases in peak river flow, rainfall intensity and sea level rise that are applied in flood risk assessment to consider future conditions.
Climate hazard	The potential occurrence of a natural or human-induced physical climate event or trend that may cause loss of life, injury, or other health impacts, as well as damage and loss to property, infrastructure, livelihoods, service provision, ecosystems and environmental resources.
Climate Projections	Scientifically modelled estimates of future climate conditions based on assumptions about greenhouse gas emissions and climate system responses (e.g. UKCP18).

Term	Definition
Climate Resilience	The capacity of systems and their components to anticipate and cope with climate events or trends or disturbance, and accommodate, or recover from the effects of the climate event or trend in a timely and efficient manner.
Climate variable	Factors including temperature, humidity, precipitation, and wind.
Coal Mining Reporting Area	A defined geographical area where coal mining activities are recorded or assessed for potential hazards.
Committed Development	A development that is consented, under construction, or sufficiently advanced in the planning process to be considered in the cumulative effects assessment.
Common receptor	A receptor that may be affected by the Proposed Development and one or more Other Developments, or by more than one type of residual effect from the Proposed Development.
Competent Authority	The authority responsible for deciding whether a plan or project can proceed under the Habitats Regulations and for ensuring that HRA requirements are met.
Conceptual site model	A representation of the characteristics of the Study Area in diagrammatic or written form that shows the possible Pollutant linkages between Contaminants, Pathways and Receptors
Conservation Area	An area designated for its special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance.
Conservation objectives	The ecological objectives for a designated site that describe the condition and function that should be maintained or restored for its qualifying features.
Construction materials	Primary, recycled / secondary and renewable sources of materials required for constructing a project.
Construction Phase	The period during which site preparation, demolition, construction, installation and commissioning activities take place.
Construction Traffic Management Plan	A document that defines measures to manage and mitigate traffic and transport impacts during construction, including routing, timing and control of construction vehicles.
Construction Traffic Noise	Noise generated by vehicles traveling to and from a construction site, which can impact nearby sensitive receptors.

Term	Definition
Consultation	The formal process of engaging with stakeholders, including statutory and non-statutory consultees, to gather input and feedback on the Environmental Impact Assessment.
Consultation Zone	The Office for Nuclear Regulation (ONR) and the HSE set consultation distances around nuclear installations, major accident hazard (MAH) sites and MAH pipelines after assessing the risks and likely effects of major accidents at the nuclear installation/major hazard site/pipeline. The area enclosed within the consultation distance is referred to as the Consultation Zone (CZ). The local planning authority is notified of this consultation distance and has a statutory duty to consult the ONR/HSE on certain proposed developments within that CZ.
Contaminant	A substance that is in, on or under the land and that has the potential to cause harm or to cause pollution to the water environment.
Contaminant linkage	The relationship between a contaminant, pathway and receptor, which is identified by developing the Conceptual Site Model (CSM). See also source-pathway-receptor linkage.
Contaminated Land	Defined in section 78A(2) of the Environmental Protection Act as: 'any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that - '(a) significant harm is being caused or there is a significant possibility of such harm being caused, or; '(b) pollution of controlled waters is being, or is likely to be, caused.' OR with respect to radioactive contamination defined in section 78A(2)(as modified) as 'any land which appears to the local authority in whose area it is situated to be in such a condition, by reasons of substances in, on or under the ground, that: (a) harm is being caused, or (b) there is a significant possibility of such harm being caused.'
Controlled waters	Defined in section 78A(9) by reference to Part 3 (section 104) of the Water Resources Act 1991; this embraces territorial and coastal waters, inland fresh waters, and ground waters. Section 78A(9) was amended by section 86 of the Water Act 2003 so that for Part 2A purposes 'ground waters' does not include waters contained in underground strata but above the saturation zone.
Critical Level	A critical level is the concentration of a pollutant in the atmosphere above which direct adverse effects on receptors, such as ecological designated site.

Term	Definition
Critical Load	A quantitative estimate of exposure to one or more pollutants below which significant harmful effects on specified ecological designated receptors do not occur.
Cultural Heritage	The legacy of physical artifacts and intangible attributes of a group or society, including buildings, monuments, landscapes, books, works of art, and traditions.
Culvert / Culverted watercourse	A section of watercourse enclosed within a structure, typically underground, to convey flow beneath land or infrastructure.
Cumulative Development	Other existing, consented or reasonably foreseeable developments that may contribute to cumulative traffic and transport effects when considered alongside the Proposed Development.
Cumulative Effects Assessment	An assessment of the potential effects of the Proposed Development in combination with other relevant developments.
Decarbonisation	The process of reducing carbon dioxide emissions through the use of low-carbon technologies and practices.
Decibel (dB)	A scale for comparing the ratios of two quantities, including sound pressure and sound power. The difference in level between two sounds s_1 and s_2 is given by $20 \log_{10} (s_1 / s_2)$. The decibel can also be used to measure absolute quantities by specifying a reference value that fixes one point on the scale. For sound pressure, the reference value is $20\mu\text{Pa}$.
Demolition	The action or process of deconstructing, demounting or otherwise bringing down / breaking out of buildings and structures.
Derogations / IROPI tests	The legal tests considered only if a project would adversely affect site integrity, including whether there are alternatives, whether there are imperative reasons of overriding public interest, and whether compensatory measures can be secured.
Development Consent Order	A statutory order made under the Planning Act 2008 granting development consent for a Nationally Significant Infrastructure Project.
Dewatering	The temporary removal or control of groundwater or rainwater, typically to allow excavations or below-ground construction works to take place in dry conditions.
Diffusion tube	Passive monitoring devices used to measure concentrations of nitrogen dioxide (NO_2) in the air.
Direct employment opportunities	Jobs created as a direct result of the Proposed Development.

Term	Definition
Disaster	In the context of the Proposed Development, a naturally occurring phenomenon such as an extreme weather event (for example, storm, flood, temperature) or ground-related hazard events (for example, subsidence, landslide, earthquake) with the potential to cause an event or situation that meets the definition of a (major) accident, as defined above.
Disposal	Any operation in waste management that is not recovery (e.g. discarding waste to landfill). This includes any operation that has as a secondary consequence such as the reclamation of substances or energy.
Domesday Book	A manuscript record of the “Great Survey” of much of England and parts of Wales completed in the year 1086, providing a detailed account of landholdings and resources.
Driver Delay	Delay experienced by vehicle drivers as a result of congestion, increased traffic demand or reduced network capacity.
EIA Regulations	The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.
Embodied carbon	The total greenhouse gas emissions associated with the production, transportation, and installation of building materials.
Emissions Factor	Value used to estimate the amount of greenhouse gas emissions produced per unit of activity, such as per tonne of material or per kWh of energy.
Environmental Assessment of Traffic and Movement	Guidance issued by the Institute of Environmental Management and Assessment setting out best practice for assessing traffic and transport effects within EIAs.
Environmental Impact Assessment	A process that evaluates the environmental effects of a development, considering inter-related socio-economic, cultural, and human-health impacts.
Environmental Statement	A statement prepared in accordance with the EIA Regulations containing the information reasonably required to assess the likely significant effects of a development, having regard to current knowledge and methods of assessment, and is prepared in accordance with the latest Scoping Opinion adopted by the Secretary of State (where relevant).
Exposure	The presence of people, livelihoods, species or ecosystems, environmental functions, services, resources, infrastructure,

Term	Definition
	or economic, social or cultural assets in places and settings that could be affected by climate change.
External Influencing Factor	A factor that occurs beyond the Site that may present a risk to the Proposed Development, e.g. if an external major event occurred (e.g. fire or a Control of Major Accident Hazards (COMAH) site major accident) it would increase the risk of serious damage to a receptor associated with the Proposed Development.
Fear and Intimidation	The level of discomfort or anxiety experienced by non-motorised users due to traffic volumes, vehicle speeds, HGV presence and proximity of traffic.
Flood defence	A structure or system, such as flood walls, embankments or tidal gates, used to reduce the probability or consequences of flooding.
Flood Risk Activities Permit	A permit that may be required for works on, near, or within a specified distance of a main river, flood defence or culvert, or within a floodplain.
Flood Risk Assessment	An evaluation of the potential implications of a development on flood risk to people and property.
Flood Zone 1	Land assessed as having a less than 1 in 1000 annual probability of river or sea flooding in any year.
Flood Zone 2	Land assessed as having between a 1 in 100 and 1 in 1000 annual probability of river flooding, or between a 1 in 200 and 1 in 1000 annual probability of sea flooding.
Flood Zone 3	Land assessed as having a 1 in 100 or greater annual probability of river flooding, or a 1 in 200 or greater annual probability of sea flooding.
Floodplain compensation	Measures used to offset any loss of floodplain storage caused by development, so that flood risk is not increased elsewhere.
Fossil fuel	Hydrocarbon-containing material of biological origin that can be combusted for energy.
Fugitive dust emissions	Dust particles that are not captured by control devices and are released into the atmosphere from construction activities.
Functional floodplain	Land where water must flow or be stored in times of flood, commonly associated with Flood Zone 3b.
Functionally Linked Land	Land outside a designated site that is important for the ecological or behavioural functioning of the site's qualifying species.

Term	Definition
Gantries	An overhead structure (similar to a bridge) with a platform that carries pipes, cables or other equipment.
Green Belt	A designated area of open, undeveloped, or agricultural land surrounding urban areas, intended to limit urban sprawl, protect natural habitats, and provide recreational and ecological benefits.
Greenhouse gases	Gases that trap heat in the atmosphere, contributing to global warming and climate change. Examples include carbon dioxide (CO ₂), methane (CH ₄), and nitrous dioxide (NO ₂).
Groundwater	Water held beneath the ground in soil, superficial deposits or bedrock.
Groundwater Dependant Terrestrial Ecosystems	Habitats or ecosystems that depend on groundwater to maintain their ecological character and functioning.
Groundwater flooding	Flooding caused when groundwater levels rise above the ground surface or interact with shallow structures and drainage systems.
Habitat	The environment in which populations or individual species live or grow.
Habitats Directive	Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna.
Habitats of Principal Importance	Refers to specific natural or semi-natural habitats for the conservation of biodiversity in England, Scotland Wales and Northern, as published on statutory government lists.
Habitat Suitability Index (HSI)	A numerical representation of a wildlife dwelling that determines whether it has the necessary capacity to support the relevant species occupying it.
Habitats Regulations Screening Assessment (HRSA)	The Stage 1 part of HRA that identifies whether likely significant effects on relevant National Network Sites can be ruled out.
Hazard	Anything with the potential to cause harm, including ill-health and injury, damage to property or the environment, or a combination of these.
Hazardous waste	Any waste that displays one or more of the hazardous properties listed in Annex III of the Waste Directive (2008/98/EC).
Health effects	An impact on physical, mental and social well-being resulting from exposure to a source.
Health outcomes	The health status of an individual, group or population, attributable to a planned intervention (e.g a project)

Term	Definition
Heat Recovery Steam Generators	Equipment that recovers heat from hot gas streams, typically used in power plants to improve efficiency.
Heavy Goods Vehicle	A large commercial vehicle used for transporting freight, typically exceeding 3.5 tonnes gross vehicle weight.
Heritage Advocacy	Efforts to promote the protection and appreciation of heritage assets, often led by heritage organisations and community groups.
Heritage Assets	Buildings, monuments, sites, places, areas, or landscapes identified as having a degree of significance meriting consideration in planning decisions.
Heritage Conservation	The process of managing change to heritage assets in ways that sustain and enhance their significance.
Heritage Consultancy	Professional advice and services provided by heritage specialists to support the conservation and management of heritage assets.
Heritage Documentation	The creation of records and reports about heritage assets, including their condition, significance, and any changes that occur over time.
Heritage Education	Programs and activities designed to increase public awareness and understanding of heritage assets and their significance.
Heritage Enhancement	Actions taken to improve the condition, understanding, or appreciation of heritage assets.
Heritage Funding	Financial support for the conservation, management, and enhancement of heritage assets, often provided by government agencies, charities, and private donors.
Heritage Impact Assessment	An assessment of the potential effects of a proposed development on heritage assets and their settings.
Heritage Interpretation	The communication of information about heritage assets to the public, often through signage, exhibitions, or digital media.
Heritage Legislation	Laws and regulations that provide for the protection and management of heritage assets.
Heritage Management	The practice of protecting and managing heritage assets to ensure their preservation and appreciation by future generations.
Heritage Mitigation	Measures taken to avoid, reduce, or offset the adverse effects of a proposed development on heritage assets.

Term	Definition
Heritage Planning	The integration of heritage conservation and management into the planning and development process.
Heritage Policy	Government policies and strategies for the conservation and management of heritage assets.
Heritage Preservation	The protection and maintenance of heritage assets to ensure their survival for future generations.
Heritage Protection	Legal and policy measures to safeguard heritage assets from harm.
Heritage Recording	The process of documenting heritage assets, including their condition, significance, and any changes that occur over time.
Heritage Research	The study of heritage assets, including their history, significance, and conservation needs.
Heritage Significance	The value of a heritage asset to this and future generations because of its heritage interest, which may be archaeological, architectural, artistic, or historic.
Heritage Statement	A document that assesses the significance of heritage assets affected by a proposed development and the impact of the development on that significance.
Heritage Tourism	Tourism focused on visiting and experiencing heritage assets, often contributing to their conservation and management.
Hibernacula features	Features or structures that provide habitat suitable for the over-wintering hibernation of species.
Important Ecological Features	Habitats, species, ecosystems, and their functions that are valuable to biodiversity and could be affected by a Proposed Development. This includes statutory designated sites, protected species and habitats, and habitats that provide ecosystem services and/or habitat connectivity.
Inter-project assessment	An assessment of the potential effects of the Proposed Development in combination with other relevant developments.
Inter-project effect	An effect arising from the Proposed Development in combination with one or more Other Developments.
Intra-project assessment	An assessment of the potential effects arising from the interaction of different residual effects of the Proposed Development on the same receptor.
Intra-project effect	An effect arising from the interaction of different residual effects of the Proposed Development on the same receptor.

Term	Definition
Invasive Non-native Species (INNS)	An invasive non-native species is any living thing which has spread outside its native range and causes environmental and/or economic harm in its new environment.
Local Authority	The relevant local planning authority responsible for determining planning applications in its administrative area.
Local Wildlife Site (LWS)	Non-statutory designated sites with substantive nature conservation value.
Long list	An initial list of selected Other Developments within the Zone of Influence, prepared using defined screening criteria and relevant planning information.
Historic England	The public body that looks after England's historic environment, providing advice on heritage conservation and management.
Historic Environment	All aspects of the environment resulting from the interaction between people and places through time, including buildings, monuments, sites, and landscapes.
Historic Environment Record	A primary repository of information about the historic environment, including archaeological sites, historic buildings, and landscapes.
Human health	A state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity
Hydrogen Ready Combined Heat and Power	A facility designed to generate both electricity and useful heat from hydrogen fuel, contributing to decarbonisation efforts.
Impact	The changes resulting from an action.
Impact pathway	The route or mechanism by which the project could affect a designated site or its qualifying features, such as air quality, noise, visual disturbance, or water quality.
In-Combination Climate Impacts	An ICCI occurs where climate change alters the significance of a project's effect on an environmental receptor. This arises when a climate change impact exacerbates or diminishes an identified project effect, meaning that any mitigation measures must account for future climate conditions to remain effective.
In-combination effects	Effects arising from the project together with other plans, projects, or activities, where the combined effect may be greater than the project acting alone.
Indirect employment Opportunities	Jobs created in the supply chain as a result of the Proposed Development.

Term	Definition
Induced employment Opportunities	Jobs created from additional spending by direct and indirect employees.
Industrial Carbon Capture Facility	A facility designed to capture carbon dioxide emissions from industrial processes, reducing greenhouse gas emissions.
Inert waste	Waste: ▪ That does not undergo any significant physical, chemical or biological transformations; ▪ That does not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter from which it comes into contact in a way likely to give rise to environmental pollution or harm to human health; and ▪ Where its total leachability and pollutant content and the ecotoxicity of its leachate are insignificant and, in particular, do not endanger the quality of any surface water or groundwater (see Directive 1993/31/EC 'The Landfill Directive').
Internal Influencing Factor	A factor that occurs within the Site that may present a risk to the Proposed Development.
Intervisibility	The ability to see one location from another, often used in the context of assessing the visual impact of a development on heritage assets.
Junction Turning Counts	Traffic survey data identifying traffic volumes by turning movement at junctions, typically over peak and off-peak periods.
Key construction materials	Construction materials that constitute the majority of material required to deliver the scheme (by weight).
Land Use, Land Use Change and Forestry	Activities related to the use and management of land and forests, which can affect greenhouse gas emissions.
Landfill capacity	The known, forecast or estimated remaining landfill void space, either regionally or nationally, generally measured in cubic metres.
Landscape sensitivity	The resilience of the landscape to accommodate change.
Lifecycle Stages	Different phases in the life of a product or development, from raw material extraction to disposal, used to assess environmental impacts.
Likely Significant Effect	The significance of an environmental effect is typically a function of the value or sensitivity of the receptor and the magnitude or scale of the impact. Combining the environmental value of the resource or receptor with the magnitude of change produces a significance of effect

Term	Definition
	category. The definition of a significant effect for each environmental topic will be contained within chapter of the Environmental Statement.
Listed Building	A building or structure officially designated as being of special architectural, historical, or cultural significance.
Local Highways Authority	The public authority responsible for the management and maintenance of the local road network.
Made Ground	Soil or material that has been artificially deposited or significantly altered by human activity, rather than occurring naturally.
Magnitude of Impact	The scale, extent, duration and severity of change from baseline conditions caused by a development.
Magnitude of Impact	The magnitude of an impact is typically defined by the following factors: ▪ Extent – the area over which an effect occurs; ▪ Duration – the time for which the effect occurs; ▪ Frequency – how often the effect occurs; and ▪ Severity – the degree of change relative to existing conditions.
Main river	A watercourse shown as such on the Flood Map for Planning and can include any structure or appliance for controlling or regulating the flow of water in, into or out of a main river. Main Rivers are usually larger streams and rivers, but also include smaller watercourses of strategic drainage importance. Main Rivers are under the jurisdiction of the Environment Agency which has powers to carry out flood defence works to them.
Major Accident and Disaster Category	A set of values used to categorise events within a related parent MA&D group.
Major Accident and Disaster Group	A MA&D which can be grouped as either a natural hazard (disaster) or a technological or manmade hazard (major accident).
Major Accident and Disaster Type	A set of values used to sub-categorise events within an MA&D category.
Mineral Resource Area	Land of long-term commercial significance for extracting minerals.
Mineral sites	Operational sites or sites identified within strategic planning documents for the extraction of minerals.
Mitigation Measures	Actions or measures designed to avoid, reduce or offset adverse environmental effects.

Term	Definition
National Nature Reserve (NNR)	A site of importance for wildlife, geology, education, or public enjoyment.
Nationally Designated Site	Areas of land subject to protection under UK legislation, including Sites of Special Scientific Interest (SSSI) and National Nature Reserves (NNR).
National Cycle Network	A UK-wide network of signed walking and cycling routes developed and maintained by Sustrans.
National Site Network	The network of protected sites covered by the Habitats Regulations in the UK, including Special Areas of Conservation and Special Protection Areas.
Nationally Significant Infrastructure Project	A large-scale development falling under the Planning Act 2008 and requiring development consent from the Secretary of State.
Net Zero	Reduction of anthropogenic greenhouse gas emissions to zero or to a residual level that is consistent with reaching net zero emissions in eligible 1.5°C pathways (hence time-bound) and neutralizing the impact of residual emissions (if any) by removing an equivalent volume of carbon.
Nitrogen deposition	The deposition of nitrogen compounds from the atmosphere to the ground, which can impact ecosystems.
Nitrogen Oxides	Pollutants produced by combustion processes, which can impact air quality and human health.
Non-aqueous phase liquid	A non-aqueous phase liquid is immiscible with water.
Non-designated Heritage Assets	Buildings, monuments, sites, places, areas, or landscapes identified as having a degree of significance meriting consideration in planning decisions but not formally designated.
Non-hazardous waste	Waste that is neither classified as inert nor hazardous.
Non-Motorised User	People travelling without motor vehicles, including pedestrians, cyclists and equestrians.
Non-Road Mobile Machinery	Machinery used for construction and other activities that is not intended for use on public roads.
Non-statutory Consultees	Organisations or bodies that are not legally required to be consulted but may provide valuable input during the EIA process.
Non-Technical Summary	A summary of the Environmental Statement written in plain language. It conveys the key findings and impacts of a project in an understandable and accessible manner,

Term	Definition
	avoiding the use of jargon and using visual aids to aid comprehension.
Open mosaic habitat	A habitat type of ecological value that is found predominantly on brownfield sites. It features a complex, naturally developing patchwork of bare ground, sparse pioneer vegetation, dense grassland, ephemeral pools, and scrub.
Operational Carbon	Greenhouse gas emissions resulting from the operation of a building or infrastructure, including energy use for heating, cooling, lighting, and equipment.
Operational Phase	The period following construction during which the development is in use and functioning as intended.
Other Developments	Reasonably foreseeable developments identified within the Zone of Influence for consideration in the cumulative effects assessment.
Outline Code of Construction Practice	A document outlining the measures to be taken during construction to manage and mitigate environmental impacts.
Outline Planning Application	A planning application that establishes the principle of development, with some or all detailed matters reserved for later approval.
Parasitic Load	The energy consumed by auxiliary systems and equipment that support the main operation of a facility, such as pumps and fans.
Particulate Matter (PM ₁₀ , PM _{2.5})	Invisible airborne particles that can be inhaled by humans and impact respiratory health.
PAS 2080	A publicly available specification for carbon management in infrastructure, providing guidelines for reducing carbon emissions throughout the lifecycle of a project.
Pathway	A route or means by which a receptor could be, or is exposed to, or affected by a Contaminant.
Peak rainfall allowance	An uplift applied to rainfall intensity estimates to account for the future effects of climate change.
Peak river flow allowance	An uplift applied to river flow estimates to account for the future effects of climate change.
Peat resource	Existing or potential peat extraction sites.
Personal Injury Collision	A road traffic collision resulting in injury, recorded in official police accident statistics.

Term	Definition
Pollution of controlled waters	Defined in section 78A(9) as: 'the entry into controlled waters of any poisonous, noxious or polluting matter or any solid waste matter.'
Population	All individuals located in a particular location (this can be local, regional or at a national scale)
Preparing for reuse	Checking, cleaning or repairing operations, by which products or components of products that have become waste are prepared for reuse without further pre-processing.
Preliminary Ecological Appraisal (PEA)	Preliminary ecological surveys have a range of purposes; one key use is to gather data on existing conditions, often with the intention of conducting a preliminary assessment of likely impacts of Proposed Developments or establishing the baseline for future monitoring. As a precursor to a proposed project, some evaluation is usually made within these appraisals of the ecological features present, as well as scoping for notable species or habitats, identification of potential constraints to the Proposed Development and recommendations for mitigation measures.
Pre-application	A stage before a formal planning or development consent application is submitted.
Primary materials	Materials that are from a non-renewable source (also referred to as virgin materials).
Priority Habitat	Habitats which have been deemed to be of principal importance for the purpose of conserving biodiversity, being listed in the UK Biodiversity Action Plan.
Priority Habitat Inventory	A spatial dataset that describes the geographic extent and location of Natural Environment and Rural Communities Act (2006) Section 41 Habitats of Principal Importance (HPI).
Principal aquifer	A geological unit of high importance that can provide significant water supplies and may support rivers, wetlands or other sensitive receptors.
Proposed Development	The Stanlow Hydrogen Ready Combined Heat and Power Project that is the subject of this document.
Public Rights of Way	Legally protected routes that the public may use, including footpaths, bridleways and byways.
Q95 flow	A low flow statistic representing the flow that is equalled or exceeded for 95% of the time, used as an indicator of watercourse flow characteristics.
Qualifying features	The habitats, species, or assemblages for which a site has been designated and which the HRA must consider.

Term	Definition
Ramsar site	Wetlands of international importance, designated under the Ramsar Convention 1971.
Receptor	A component of the natural, created or built environment such as a human being, water, air, a building, habitat or plant that has the potential to be affected by the Proposed Development.
Recovery	Any operation that results in a waste serving a useful purpose by replacing primary materials which would otherwise have been used to fulfil that particular function. Recovery also includes waste being prepared or processed to fulfil a particular function.
Recycle	Any recovery operation where waste is reprocessed into products, materials or substances whether for its original or other purposes. Recycling includes the reprocessing of organic material but excludes energy recovery and the reprocessing of waste into materials to be used as fuels or for backfilling operations.
Refinery	An industrial installation where crude oil is refined into products including petrol and diesel.
Representative Concentration Pathway	A greenhouse gas concentration trajectory used in climate modelling. RCP8.5 represents a high-emissions scenario.
Reserved Matters	Details of a development, such as appearance, layout, scale or landscaping, that are submitted for approval after outline planning permission has been granted.
Residual Effects	Environmental effects remaining after mitigation measures have been applied.
Residual flood risk	The risk of flooding that remains after flood risk management measures are taken into account, including risks such as overtopping or breach of defences.
Resilience	The capacity of systems and their components to anticipate and cope with a hazardous event or trend or disturbance, and accommodate, or recover from the effects of a hazardous climate event or trend in a timely and efficient manner.
Reuse	Any operation by which products or components that are not waste are used again for the same purpose for which they were conceived; reuse presumes that significant reprocessing is not required.
Risk	The likelihood of an impact occurring, combined with the effect or consequence(s) of the impact on a receptor if it does occur.

Term	Definition
Risk Assessment	The formal process of identifying, assessing and evaluating the health and environmental risks that may be associated with a hazard.
Risk Event	An identified, unplanned event, which is considered relevant to the Proposed Development and has the potential to be an MA&D subject to assessment of its potential to result in a significant adverse effect on a receptor.
Scheduled Monument	A nationally important archaeological site or historic building, given protection against unauthorised change.
Scoping Opinion	The formal response from the Secretary of State on the proposed scope of the EIA, based on the information provided in the EIA Scoping Report.
Scoping Report	The document that identifies the likely key environmental topics and proposed assessment scope for the project, and which this report uses to help define relevant impact pathways and zones of influence.
Screening	The first stage of HRA in which the potential for likely significant effects is considered based on the project, the relevant sites, their qualifying features, and the possible impact pathways.
Secondary (materials)	Useful by-products from manufacturing or industrial processes.
Secondary A aquifer	A permeable superficial deposit capable of supporting local groundwater supplies and contributing baseflow to rivers, but with limited regional significance.
Secondary Undifferentiated Aquifer	A geological unit with variable characteristics where it is not possible to classify it as Secondary A or B, generally having minor water resource value.
Sensitivity	The sensitivity of a receptor is a function of its value, and capacity to accommodate change reflecting its ability to recover if it is affected. It is typically defined by the following factors: ▪ Adaptability – the degree to which a receptor can avoid, adapt to or recover from an effect; ▪ Tolerance – the ability of a receptor to accommodate temporary or permanent change; and ▪ Recoverability – the temporal scale over and extent to which a receptor will recover following an effect.
Severance	The separation of people from places or from other people as a result of increased traffic flows or difficulty crossing roads.

Term	Definition
Shortlist	A refined list of Other Developments taken forward for further assessment where there is potential for temporal overlap, sufficient environmental information, and common receptors.
Significant number of birds	In this report's FLL context, a population level used as a screening aid to help judge whether land outside the designated site may be functionally important for qualifying bird species.
Site arisings	Construction, demolition, excavation and other arisings generated from within a project boundary.
Site integrity	The coherence of a site's ecological structure, function, and conservation objectives, including its ability to support the qualifying features for which it is designated.
Site of Special Scientific Interest (SSSI)	A site statutorily notified under the Wildlife and Countryside Act 1981 as being of special nature conservation or geological interest. SSSIs include habitats, geological features, and landforms.
Site Waste Management Plan	A system or document for implementing, monitoring and reviewing waste prevention measures
Source	The origin of a Contaminant that could adversely affect a receptor if a suitable pathway was available.
Source Protection Zone	An area designated to protect groundwater abstractions used for drinking water supply, with different zones reflecting travel time and risk to the abstraction.
Species	A group of interbreeding organisms that seldom or never interbreed with individuals in other such groups, under natural conditions; most species are made up of subspecies or populations.
Special Areas of Conservation (SAC)	High quality conservation sites that are protected under the European Union Habitats Directive, due to their contribution to conserving those habitat types that are considered to be most in need of conservation.
Special Protection Areas (SPA)	Sites classified in accordance with Article 4 of the EC Birds Directive (79/409/EEC) which came into force in April 1979. They are classified for rare and vulnerable birds (as listed on Annex 1 of the Directive), and for regularly occurring migratory species.

Term	Definition
Statutory Consultee	Organisations or bodies that must (by law) be consulted during the EIA process, such as local councils and environmental agencies.
Sterilise	Substantially constrain / prevent existing and potential future use and extraction of materials.
Strategic Road Network	The motorway and trunk road network managed by National Highways.
Study Area	The broader geographical area considered in the assessment, including the availability of construction materials and the capacity of waste management facilities.
Superficial Deposit	Natural geological deposits consisting of unconsolidated sediments like gravel, sand, silt and clay. They lay on top of bedrock.
Surface water runoff	Rainwater flowing over the ground or from impermeable surfaces into drainage systems or receiving watercourses.
Sustainable Drainage Systems	Drainage measures designed to manage surface water runoff in a way that helps control flow, improve water quality and, where possible, provide environmental benefits.
Tidal gate	A flow control structure used to prevent tidal water entering inland watercourses and to help manage water levels.
Tier	A categorisation used in the long list to indicate the level or stage of consideration for a development in the cumulative effects assessment.
Transport Assessment	A technical study assessing the transport and traffic impacts of a development and identifying required mitigation.
Travel Plan	A package of measures designed to promote sustainable transport choices and reduce single-occupancy car use.
UK Carbon Budget	The cumulative volume of carbon dioxide emissions permitted within a defined five-year period, as determined by the Secretary of State, and guided by the Climate Change Committee (CCC), in accordance with the duties under sections 4(1)(a) and 8(1) of the Climate Change Act 2008.
Viewpoint	Chosen location for assessing views of the development.
Visitor and Workforce Trips	Trips generated to and from a site by employees, contractors or visitors during construction or operation.
Visual amenity	The value of view in relation to residential or recreational use.
Visual receptor	People impacted by the changes in views from the development.

Term	Definition
Vulnerability	In the context of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (on the assessment of the effects of certain public and private projects on the environment) the term refers to the ‘exposure and resilience’ of the Proposed Development to the risk of a MA&D. Vulnerability is influenced by sensitivity, adaptive capacity and magnitude of impact.
Waste	Any substance or object that is discarded, and that has not been subject to acceptable recovery (including recycling) or disposal.
Waste hierarchy	The waste hierarchy is set out in Article 4 of the revised Waste Framework Directive (2008/98/EC). It ranks waste management options according to what is best for the environment, which gives priority to waste prevention, followed by preparing for reuse, recycling, other types of recovery and finally disposal (e.g., landfill).
Waste infrastructure	Facilities that handle, treat/prepare for reuse, recycle and dispose (landfill) of waste.
Waste types:	(see separate definitions below)
Water Framework Directive waterbody	A river, transitional water, lake, coastal water or groundwater unit monitored and classified for ecological and/or chemical status under the Water Framework Directive framework.
Waterbird assemblage	A grouping of waterbird species occurring together and forming part of the reason for a site’s designation, such as the non-breeding assemblage referred to for the Mersey Estuary.
Wildlife and Countryside Act 1981 (as amended)	The principal piece of UK legislation relating to the protection of wildlife.
Whole life carbon	Sum of greenhouse gas emissions and removals from all work stages of a project and/or programme of works within the specified boundaries.
Zone of Influence	The spatial extent over which an impact pathway could reasonably affect a site or its qualifying features.



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Stanlow Hydrogen Ready Combined Heat and Power Project Development Consent Order

Volume 3, Appendix 5.1: Air Quality Monitoring Survey

02-09-2026

Document ref: 2026UK550445-ENV-001



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No figures

1. Monitoring methodology

1.1 Methodology

- 1.1.1 An air quality survey in support of the planning application for the Phase 1 of Proposed Development at the Stanlow Manufacturing Complex (SMC) was undertaken using passive Gradko diffusion tubes to measure nitrogen dioxide (NO₂) concentrations at roadside locations around the key traffic routes to the Site. The samples were exposed at selected locations and sent to the laboratory firm, Gradko, for analysis. The analysis produces a mean concentration of NO₂ for the exposure period.
- 1.1.2 The monitoring was carried out for three months from July 2024 to September 2024. **Table 1.1** and **Volume 2, Figure 5.3: Air Quality Monitoring Locations** present the number and location of the diffusion tube monitoring sites. The survey results were annualised using the methodology detailed in the Department for Environment, Food and Rural Affairs (Defra's) Local Air Quality Management Technical Guidance (LAQM-TG22) (Defra, 2022) using data from the Tranmere, Wigan Centre and Glazebury background Automatic Urban and Rural Monitoring Network (AURN) sites.

Table 1.1 Diffusion tube monitoring locations

ID	Location	X (m)	Y (m)	Height (m)
DT1	Pool Lane North	344992	375601	1.5
DT2	Pool Lane South	345065	375064	2.0
DT3	NCR 5 West	344534	374816	3.4
DT4	NCR 5 East	344784	374852	4.0
DT5	A5117 fence	343822	374716	15.0
DT6	A5117	344004	374737	4.3
DT7	A5117 westbound	345688	374960	3.1
DT8	A5117 eastbound	345665	374978	1.3
DT9	Ellesmere AURN	340197	376365	3.2

2. Results

2.1.1 The three month average results for the monitoring survey are presented in **Table 2.1**. The recorded data indicates that air quality is below the air quality standard of $40\mu\text{g}/\text{m}^3$ with higher concentrations recorded at DT9 within the town centre that is likely to experience queuing traffic.

Table 2.1 NO₂ results

ID	July-24 ($\mu\text{g}/\text{m}^3$)	Aug-24 ($\mu\text{g}/\text{m}^3$)	Sep-24 ($\mu\text{g}/\text{m}^3$)	Annual ($\mu\text{g}/\text{m}^3$)
DT1	12.5	9.4	14.8	15.1
DT2	16.9	18.7	20.9	23.2
DT3	16.2	13.6	21.5	21.1
DT4	17.0	16.5	19.5	21.8
DT5	11.7	11.0	15.7	15.8
DT6	23.5	20.8	26.7	29.2
DT7	18.0	16.8	24.7	24.4
DT8	24.5	21.6	30.6	31.5
DT9	25.7	23.8	32.3	33.6

3. References

Department for Environment, Food and Rural Affairs (Defra), (2022). *Local Air Quality Management Technical Guidance (TG22)*. Available online at: <https://laqm.defra.gov.uk/air-quality/featured/uk-regions-exc-london-technical-guidance/> (Accessed: May 2026).



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Stanlow Hydrogen Ready Combined Heat and Power Project Phase 2

**Volume 3, Appendix 7.1: Preliminary Ecological Appraisal
Report**

02-09-2026

Document ref: 2026UK550445-ENV-001



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Executive summary

WSP was commissioned by the Applicant, Essar Energy Transition Fuels (EET) to undertake a Preliminary Ecological Appraisal (PEA) and Daytime Bat Walkover (DBW) for an area of land within the Stanlow Manufacturing Complex (SMC), located in Ellesmere Port on the south side of the Mersey Estuary near Liverpool.

A UK Habitat (UKHab) survey and DBW of the Survey Area was undertaken in May 2026 to provide baseline ecological information for the Survey Area. Consideration of the potential to support legally protected or otherwise notable species or habitats was also assessed during the survey. A data search for protected and notable species records was also undertaken as part of a desk study review of existing ecological baseline information. The Survey Area contained the Site and a 30m surrounding buffer area in order to capture sufficient data on the extent of habitats within proximity to the Site.

The Mersey Estuary Site of Special Scientific Interest (SSSI), Special Protection Area (SPA), and Ramsar site is located approximately 0.7km to the north of the Red Line Boundary and is hydrologically linked to the Proposed Development. Recommendations have been made for a Habitats Regulations Screening Assessment to be undertaken, given the potential for indirect effects on the protected site resulting from the Proposed Development.

The Survey Area was dominated by developed land; sealed surface, featuring hardstanding materials and housing industrial machinery and infrastructure under consistent use, with buildings interspersed throughout. Fringes of broadleaved woodland, unmanaged modified grassland and scrub, as well as sections of a watercourse were present within the Survey Area and along the Site Boundary.

The PEA identified habitats within the Survey Area that have the potential to support protected species including roosting bats, badger *Meles meles*, birds, including peregrine falcon *Falco peregrinus* and water vole *Arvicola amphibius*.

Recommendations have been made for further ecological surveys, to inform the determination of baseline conditions and biodiversity assessment within the Ecological Impact Assessment (EclA). This includes further survey of the woodland parcels to assess suitability for badgers and roosting bats, water vole surveys of a watercourse along the south of the Site and assessment of the Site to support nesting peregrine.

1. Introduction

1.1 Project Background

- 1.1.1 An introduction to the Proposed Development can be found in **Volume 1, Chapter 1: Introduction** and **Volume 1, Chapter 2: The Proposed Development** of the Environmental Statement (ES). As part of the Proposed Development, redundant buildings and facilities will be removed. Full details are included within **Chapter 2: The Proposed Development** but it will include the removal of a number of buildings and the clearance of limited areas of on-site habitat.
- 1.1.2 This PEA is based on the site plans and scheme information provided by the Applicant in April 2026. The land upon which the Proposed Development is to be located is referred to as the 'Site'. The Site boundary used for the purpose of the PEA is shown on **Figure 1: Site Plan and Survey Area of Appendix A: Figures**. The Site covers 67.32 hectares (ha) and is centred on grid reference SJ 44485 75488 in Ellesmere Port, Cheshire.

1.2 Scope of Report

- 1.2.1 This Preliminary Ecological Appraisal (PEA) Report has been produced to support **Volume 1, Chapter 7: Biodiversity** of the Scoping Report and the future progression of the Biodiversity Chapter of the ES.
- 1.2.2 The scope of this PEA Report is to:
- Provide baseline ecological information about the Site and surrounding study area, with particular reference to whether legally protected and/or notable sites, species or habitats are present or likely to be present within the Site;
 - To provide recommendations to enable compliance with relevant nature conservation legislation and planning policy; and
 - If necessary, to identify the need for further ecological surveys and/or avoidance, mitigation, compensation or enhancement measures.
- 1.2.3 Figures used to support this PEA are displayed in **Appendix A: Figures**.

1.3 Relevant Legislation and Policy

- 1.3.1 The PEA Report has been prepared in context of the current national policy and legislative framework for nature conservation as summarised in **Appendix B: Legislation and National Policy Context**. **Section 4** discusses the implications

of the legislation and policy relevant to the Proposed Development. This does not constitute legal advice, and the original legislation should be consulted for details.

Legislation

- The Conservation of Habitats and Species Regulations 2017 (as amended) (Habitats Regulations);
- The Wildlife and Countryside Act 1981 (as amended) (WCA);
- Countryside Rights of Way (CROW) Act 2003;
- The Natural Environment and Rural Communities (NERC) Act 2006 (as amended) (England);
- The Protection of Badgers Act 1925;
- The Hedgerow Regulations 1976; and
- Environment Act 2021.

Policy

- The National Planning Policy Framework (NPPF) 2025;
- Biodiversity 2020: A strategy for England's wildlife and ecosystem services (Defra, 2010);
- UK Biodiversity Action Plan (UKBAP, 2011);
- The UK Post-2010 Biodiversity Framework (2011-2020) (JNCC and Defra, 2012); and
- Cheshire West and Chester Local Plan (Part One) Strategic Policies (adopted 2015).

2. Methods

2.1 Overview

- 2.1.1 This PEA Report presents the findings of the PEA and has been prepared with reference to current good practice guidance published by the Chartered Institute for Ecology and Environmental Management (CIEEM, 2017a, 2017b and 2019) and guidance contained in the British Standard for biodiversity (British Standards Institute (BSI), 2013).
- 2.1.2 This PEA is based on the following data sources:
- An ecological desk study;
 - A UK Habitat (UKHab) survey;
 - A protected/priority species assessment; and
 - A Daytime Bat Walkover (DBW) including a Preliminary Roost Assessment (PRA) of buildings to be demolished.

2.2 Desk Study

- 2.2.1 The desk study was undertaken in May 2026 to review the existing ecological baseline information available in the public domain and to obtain information held by relevant third parties (**Table 2.1**).
- 2.2.2 The ecological desk study was carried out by a seasonal ecologist with a 'Foundation' level of competence in ecological assessment, assisted by an Associate Member of CIEEM who is 'Capable' in carrying out ecological assessments and desk studies of this type (CIEEM, 2024).
- 2.2.3 For the purpose of the desk study, records were collated within various radii around the Site. This approach is consistent with current good practice guidance published by CIEEM (CIEEM, 2017a and 2017b). To provide the baseline data for the ecological desk study, the following information was requested from RECORD (the Local Environmental Records Centre (LERC) for Cheshire, Halton, Warrington and Wirral) and Cheshire Wildlife Trust.
- Records of legally protected and notable species from the previous 10 years within 2km of the Site.
 - Non-statutory designated wildlife sites within 2km of the Red Line Boundary (RLB).

- 2.2.4 Publicly available datasets (available from Natural England) were consulted for information regarding the presence of statutory designated habitats within 2km of the Site. This search was extended to 10km for Special Areas of Conservation (SAC) and Special Protected Areas (SPA) that are of European importance and internationally designated Ramsar sites and extended to 30km for designations where bats and birds are the qualifying feature.
- 2.2.5 Publicly available datasets (available from Natural England) were consulted for information regarding Habitats of Principal Importance (HPI) within 1km and woodland listed on the Ancient Woodland Inventory.
- 2.2.6 The findings of the desk study are presented in **Section 3.2** for designated sites and habitats and **Section 3.4** for species.

Table 2.1 Desk Study Data Sources

Sources	Record Type	Search Area
RECORD	Protected and priority species	2km
RECORD	Non-statutory wildlife sites	2km
Cheshire Wildlife Trust	Protected and priority species (those listed as Species of Principal Importance (SPI))	2km
Cheshire Wildlife Trust	Non-statutory sites	2km
Natural England	Statutory sites designated under national legislation i.e. Local Nature Reserves (LNR), National Nature Reserves (NNR), Sites of Special Scientific Interest (SSSI)	2km
Natural England	Statutory sites designated at the international level (also including sites classified under international conventions). National Site Network sites: Special Protection Area (SPA), Special Areas of Conservation (SAC), potential SPA (pSPA) and candidate SAC (c.SAC); and Ramsar and potential Ramsar sites.	10km
Natural England	International statutory sites (SAC) designated for bats and/or birds	30km
Natural England Priority Habitat Inventory	Habitats of Principal Importance (HPI)	1km
Natural England Wood Pasture & Parkland BAP Priority Habitat dataset (provisional)	Wood Pasture & Parkland HPI	1km

Sources	Record Type	Search Area
Natural England Open Mosaic Habitat (OMH) dataset (draft)	OMP HPI	500m
Natural England (Ancient Woodland Inventory)	Semi-natural ancient woodland and ancient replanted woodland	1km
Woodland Trust Ancient Tree Inventory	Ancient, veteran and notable trees	250m
Ordnance Survey Mapping	Waterbodies and watercourses and their direction of flow	250m
Protected Species Licensing	Multi-Agency Geographic Information for the Countryside (MAGIC)	2km

2.3 Habitat Surveys

- 2.3.1 UKHab surveys were undertaken within the Site as indicated by the Red Line Boundary on Figure 1, including a 30m buffer (where accessible) (indicated by the blue line on Figure 1) and were carried out on 6, 7, 27 and 28 May 2026 by two suitably qualified and experienced ecologists. While this survey encompassed all land within the Site Boundary on Figure 1, a previous UKHab assessment of some of the Site had been undertaken in April 2024 to support a TCPA application associated with the Proposed Scheme. The May 2026 survey validated the findings of the previous survey where the Site boundaries intersected and undertook a new UKHab survey for any areas not previously covered.
- 2.3.2 The weather during the surveys at the beginning of May was cool and generally clear. The weather during the surveys at the end of May was hot and clear.
- 2.3.3 Habitats were described and mapped following the standard UKHab classification methodology (UKHab Ltd, 2023). Where appropriate, consideration was given to whether habitats qualify or could qualify as HPI following habitat descriptions published by the UK Biodiversity Group (BRIG) (JNCC, 2012) and The UK Habitat Classification Habitat Definitions Version 2.0 (UKHab Ltd, 2023), and whether they could classify as irreplaceable habitats, following the National Planning Policy Framework (NPPF) and The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024. At the same time, habitat classification and habitat condition assessment was carried out following the methodology in Defra's Biodiversity Metric (Defra, 2020). The habitat conditions are presented in **Section 3**.
- 2.3.4 A list of plant species was compiled by habitat type, or by habitat parcel where different areas of the same habitat had significantly different species compositions,

showing all species recorded to describe and classify the habitat type and show dominant and notable species. Relative plant species abundances were estimated using the DAFOR scale¹.

- 2.3.5 Habitats were marked on mobile mapping GIS software (Field Maps). The minimum mapping unit was 0.025ha (5m x 5m), which was selected as a suitable scale to sample the range of different vegetation types present.
- 2.3.6 Target notes were made to provide information on specific features of ecological interest (e.g. a badger sett or badger field signs), invasive species, or habitat features too small to be mapped. These are included in **Appendix C**.

2.4 Protected Species Assessment

- 2.4.1 The potential for presence of legally protected and priority species (as defined in **Section 1.2**) in the Survey Area was assessed using the desk study results, habitat survey results and incidental field observations from the habitat survey. The assessment of habitat suitability for protected and priority species was based on professional experience and judgement. This was supplemented by standard sources of guidance on habitat suitability assessment for key faunal groups (CIEEM, 2017a).

Bat Surveys

Daytime Bat Walkover

- 2.4.2 A DBW was used to determine the suitability of the Site and the wider landscape to support roosting, foraging and commuting bats based on the habitats present, as per **Table 2.2** below.

Preliminary Roost Assessment

- 2.4.3 Where the DBW identified potential habitat for roosting bats, for a targeted non-intrusive visual inspection of buildings to be demolished within the Survey Area was carried out extensively from ground level, using binoculars, to search for features that bats could use for entry/exit to the building or which may provide Potential Roosting Features (PRFs). Where suitable PRFs were identified, these features were noted and a description of their location and character recorded. Where possible, the features were visually inspected for evidence indicating use

¹ The DAFOR scale has been used to estimate the frequency and cover of the different plant species as follows: Dominant (D) - >75% cover, Abundant (A) – 51-75% cover, Frequent (F) – 26-50% cover, Occasional (O) – 11-25% cover, Rare (R) – 1-10% cover.

by roosting bats such as the presence of bats, droppings, urine staining, and scratch marks/characteristic staining (from fur oils). The surveys were conducted in accordance with the Bat Conservation Trust's (BCT's) Good Practice Guidelines (2023, hereafter BCT Guidelines).

2.4.4 As with the UKHab survey, the survey results from the April 2024 PRA were validated and additional structures not subject to survey in 2024 were assessed. This included the TENKO Warehouse, Old Demin Plant and MP Boiler House.

2.4.5 The suitability of structures for roosting bats and the suitability of habitats surrounding the Site to provide potential flight paths and foraging habitat was also categorised as detailed in **Table 2.2**, in line with BCT Guidelines, based on the features present and the location and surroundings of the structure.

Table 2.2 Categorisation of Potential Roost and Habitat Suitability (Collins, 2023)

Suitability	Roosting habitats	Potential flightpaths and foraging habitats
None	No habitat features on Site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).	No habitat features on Site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines or generate/shelter insect populations available to foraging bats).
Negligible	No obvious habitat features on Site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No obvious habitat features on Site likely to be used as flightpaths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	A structure with one or more suitable roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site but could be used by individual hibernating bats).	Habitat that could be used by small numbers of bats as flightpaths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitats.
Moderate	A structure with one or more suitable roost sites that could be used by bats	Continuous habitat connected to the wider landscape that could be used by

Suitability	Roosting habitats	Potential flightpaths and foraging habitats
	due to their size, shelter, protection, conditions, and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of the species conservation status, which is established after presence is confirmed).	bats for flightpaths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland, or water.
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats for longer periods of time due to their size, shelter, protection, conditions, and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flightpaths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses, and grazed parkland. Site is close to and connected to known roosts.

2.5 Notes and Limitations

2.5.1 Every effort has been made to provide a comprehensive description of the Survey Area. However, the following specific limitations apply to this assessment:

- Ecological survey data is typically valid for 18 months unless otherwise specified, for example if conditions are likely to change more quickly due to ecological processes, mobile species or anticipated changes in management (CIEEM, 2019).
- Records held by local biological record centres and local recording groups are generally collected on a voluntary basis. Therefore, the absence of records does not demonstrate the absence of species, it may simply indicate a gap in recording coverage.
- A number of locations within the Survey Area could not be specifically accessed on foot due to health and safety constraints (see **Figure 5: UK Habitat Plan of Appendix A: Figures**). However, these areas could be easily

observed from adjacent access routes to complete the survey. High resolution aerial imagery was also used to confirm habitats present in these areas. It is, therefore, considered that the habitat types were accurately identified.

- A number of *Cotoneaster* stands were present within the Survey Area. These have been identified to species level where possible. However, owing to the large number of horticultural varieties some plants could not be identified. None are characterised as rare or priority from a native biodiversity conservation perspective. This limitation does not affect the overall conclusions of this appraisal.
- Invasive plant species (such as those listed on Schedule 9 of the WCA 1981 (as amended) or the Invasive Alien Species Order 2019) that were evident during the habitat survey were noted. However, detailed mapping or a full survey of these species is beyond the scope of this commission.
- Assessment of the suitability of the site to support protected and priority species does not confirm that a species is present or absent, unless otherwise stated. It also does not exclude the possibility of other protected or priority species being subsequently encountered. Recommendations are made where further surveys are needed to determine the baseline or mitigation requirements.
- The UKHab survey results map (as shown on **Figure 5: UK Habitat Plan of Appendix A: Figures**) has been reproduced from field notes and plans. Whilst this provides a sufficient level of detail to fulfil the requirements of a PEA, the maps are not intended to provide precise extents of habitats or species.

3. Results

3.1 Site Context

- 3.1.1 The Site is positioned within the Stanlow Manufacturing Complex (SMC), which is a large oil refining complex located on the south side of the Mersey Estuary, in Ellesmere Port, Cheshire. The area is predominantly operational industrial land, including hardstanding, pipelines, storage tanks, access roads and built infrastructure, with areas of deciduous woodland and scrub towards the edges of the Site.

3.2 Desk Study for Designated Sites and Habitats

Designated Sites

- 3.2.1 The desk study identified three European/international designated sites within 10km across the Survey Area. A description of international designated sites is detailed in **Table 3.1** below and shown on **Figure 2: Statutory Designated Site Plans of Appendix A: Figures**.
- 3.2.2 The desk study identified one designated site of national importance within 2km from the RLB (**Table 3.2, Figure 2: Statutory Designated Site Plans of Appendix A: Figures**). No statutory sites of local importance were identified.
- 3.2.3 A total of seven non-statutory local sites were present in the desk study area (**Table 3.3, Figure 3: Non-statutory Designated Site Plans of Appendix A: Figures**).

Table 3.1 European or International Designated Sites within 10km

Site Name/ Designation	Size (ha)	Location from Red Line Boundary at its closest point	Site/Feature Summary
Mersey Estuary - Special Protected Area (SPA) and Ramsar site	5,033	700m to north	The Mersey Estuary is a large, sheltered estuary comprising large areas of saltmarsh and intertidal sand and mudflats. Intertidal flats and saltmarshes provide feeding and roosting habitat for large and internationally important populations of waterfowl. During winter, the site is of major importance for duck

Site Name/ Designation	Size (ha)	Location from Red Line Boundary at its closest point	Site/Feature Summary
			and waders. The site qualifies under article 4.1 of the Directive (79/409/EEC) as it is used regularly by 1% or more of the Great Britain population of Golden Plover <i>Pluvialis apricaria</i>. The site qualifies under article 4.2 of the Directive (79/409/EEC) as it <i>is used regularly by 1% or more of the</i> biogeographical populations of the following regularly occurring migratory species: ■ Redshank <i>Tringa totanus</i> ■ Shelduck <i>Tadorna tadorna</i> ■ Teal <i>Anas crecca</i> ■ Pintail <i>Anas acuta</i> ■ Dunlin <i>Calidris alpina alpina</i> ■ Black-tailed godwit <i>Limosa limosa islandica</i> ■ Redshank <i>Tringa totanus</i>
River Dee and Bala Lake – Special Area of Conservation (SAC)	2,331.52	8.6km to south West	Designated due to supporting the following habitats: 3260 water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and Callitriche-Batrachion vegetation. This freshwater habitat type is characterised by the abundance of water-crowfoots which form floating mats during summer. The mats modify water flow, promote fine sediment deposition, and provide shelter and food for fish and invertebrate animals. The River Dee and Bala Lake supports the following qualifying species: 1160 Atlantic salmon <i>Salmo salar</i> and 1831 Floating water-plantain <i>Luronium natans</i>. 1095 Sea lamprey <i>Petromyzon marinus</i>, 1096 Brook lamprey <i>Lampetra planeri</i>, 1099 River lamprey <i>Lampetra fluviatilis</i>, 1163 Bullhead <i>Cottus gobio</i> and 1355 Otter <i>Lutra lutra</i>.

Table 3.2 National Designated Sites within 2km

Site Name/ Designation	Size (ha)	Location from Red Line Boundary at its closest point	Site/Feature Summary
Mersey Estuary – Sites of Special Scientific Interest (SSSI)	6.702.14	700m to north	Overlapping designation of the Mersey Estuary SPA and Ramsar. An internationally important site for wildfowl comprised of large areas of intertidal sand and mudflats. The Manchester Ship Canal forms part of the southern boundary of the site and separates as a series of pools from the main estuary. The site contains important roosting sites for large numbers of wildfowl and waders which feed on invertebrates contained within intertidal sediments. The estuary supports a number of important bird species including pintail, teal, shelduck, wigeon <i>Calidris alpina</i> , dunlin, curlew <i>Numenius arquata</i> , redshank, and golden plover.

Table 3.3 Non-statutory Local Designated Sites within 2km

Site Name/ Designation	Size (ha)	Location from Red Line Boundary at its closest point	Site/Feature Summary
Gowy Meadows and Ditches – Local Wildlife Site LWS	193	40m to south	Area of fields with extensive interconnecting ditch system. Other habitats present include several small ponds, a section of river, hedgerows with mature trees and areas of swamp. Narrow strips of broadleaved woodland and poplar plantation present, including the native black poplar <i>Populus nigra</i> . Areas of black poplar are increasingly restricted in distribution. The site hosts assemblages of red and amber list Birds of Conservation Concern (BoCC) species, plus populations of mammals and invertebrates.
River Gowy - LWS	33.5	20m northwest	The LWS comprises a substantial area of the River Gowy and its riparian banks, floodplain and tributaries to the north and

Site Name/ Designation	Size (ha)	Location from Red Line Boundary at its closest point	Site/Feature Summary
			the west of the SMC. The site has ornithological interest with records of red and amber BoCC list species.
Station Road Railway - LWS	0.50	300m northeast	A disused former railway site originally designated as Open Mosaic Habitat on Previously Developed Land (OMHPDL). Reptiles potentially present within the site.
Frodsham, Helsby and Ince Marshes LWS	1150	800m northeast	The site comprises an extensive area of coastal floodplain that is used for agricultural purposes. Site provides a mosaic of habitats including grassland, complex ditch system, semi-natural and plantation woodland, scrub, tall ruderal vegetation, hedgerow, reedbed and an area of developing saltmarsh. Ornithological importance for breeding, wintering and passage species including skylark, yellow wagtail <i>Motacilla flava</i>, song thrush, linnet, yellowhammer <i>Emberiza citronella</i>, starling, lapwing, black-tailed godwit, dunlin and green sandpiper <i>Tringa ochropus</i>. Site also attracts raptor species. Botanical significance at county and national levels including yellow-vetch <i>Vicia lutea</i>, small and common cudweed <i>Logia minima</i> and <i>Filago vulgaris</i>, spindle <i>Euonymus europaeus</i>, wild celery <i>Apium graveolens</i>, greater burdock <i>Arctium lappa</i>, sea pearlwort <i>Sagina maritima</i>, meadow barley <i>Hordeum secalinum</i>, bristly oxtongue and greater sea-spurrey <i>Spergularia media</i>. The extensive ditch system is also inhabited by a good size population of water vole.
Shellway Road Pond South LWS	3.35	1km west	Large pond with fringing vegetation, planted trees and grassland.
Wervin Meadows LWS	33	1.3km southwest	Area of grazed floodplain, adjacent to the River Gowy that provides habitat for ground nesting bird species and is a

Site Name/ Designation	Size (ha)	Location from Red Line Boundary at its closest point	Site/Feature Summary
			regionally important site for breeding lapwing <i>Vanellus vanellus</i> .
Hoblane Ponds LWS	0.2	1.6km south east	A small area of wetland. Habitats include ponds and deciduous woodland.

Protected and Priority Habitat Records

3.2.4 The table below list any irreplaceable habitats and HPI records from inventories within 1km of the Site, and the distance of these from them. They are also shown in **Figure 4: HPI and Ancient Woodland of Appendix A: Figures**.

Table 3.4 Protected and Priority Habitat Records within 1km

Habitat	No. Parcels/Area	Closest Area
Lowland Mixed Deciduous woodland ²	28	Within RLB
Open mosaic habitat	6	Within RLB
Coastal and floodplain grazing marsh	55	49.61m to S (at nearest point on the Red Line Boundary)
Lowland meadows	1	613.36m to S (at nearest point on the Red Line Boundary)
Coastal saltmarsh	7	734.94m to N (at nearest point on the Red Line Boundary)
Coastal mudflats	16	820.55m to NW (at nearest point on the Red Line Boundary)

3.2.5 No natural ponds were identified within 500m of the Site.

3.2.6 The desk study did not identify any woodland listed on the Ancient Woodland Inventory (AWI) within 1km of the Site Boundary.

² It should be noted that the MAGIC Priority Habitats dataset only provides an indication as to whether any particular habitat is present. Only ancient woodland and veteran trees are considered irreplaceable habitats. Not all Priority Habitat broadleaved woodland detailed on this dataset should be considered a woodland Priority Habitat/Habitat of Principal Importance as it is a broader categorisation of all types of woodland than actual woodland Priority Habitats or HPI. Therefore, specific woodland habitat classification should be verified through an appropriate field survey before determining whether a woodland qualifies as a Priority Habitat/HPI.

3.3 Habitat Survey

3.3.1 The habitat types that were identified within the Survey Area are shown on **Figure 5: UK Habitat Plan** of **Appendix A: Figures** and are listed and described in **Table 3.5** below. A description of each habitat is provided including dominant and notable species where relevant. A species composition list, including DAFOR relative abundance ranking is included in **Appendix E: Plant Species List**. Target notes are provided in **Appendix C: Target Notes** and photographs in **Appendix D: Photographs**. Alpha-numerical codes used in this section cross-refer to the habitat classification and the order of the habitat description below does not reflect habitat importance.

Table 3.5 Habitat Records for Survey Area

Habitat, Secondary Codes	Area (ha)/ Length (m)	Condition	Summary Description	HPI?	Irreplaceable?
g3 neutral grassland, 10	0.18	Poor	At the north-western end of the Site there is an area of grassland with scattered scrub (Photograph 1). Species recorded include cock's foot <i>Dactylis glomerata</i> , common bird's foot trefoil <i>Lotus corniculatus</i> , silver birch <i>Betula pendula</i> , goat willow <i>Salix caprea</i> and ribwort plantain <i>Plantago lanceolata</i> .	No	No
g3c other neutral grassland, 80, 82	0.17	Moderate	At the eastern extent of the site, west of Pool Lane, there is an area with the potential to classify open mosaic habitat on previously developed land (Photograph 2). This comprises bare substrate and areas of derelict ground, interspersed with abundant patches of bird's foot-trefoil. Evidence of former industrial use is apparent Although this area forms part of a wider expanse of similar habitat, it is separated by the buffer boundary; however, it remains sufficient in size to meet the criteria for classification as open mosaic habitat, exceeding 0.25ha. Other species recorded include Yorkshire-fog <i>Holcus lanatus</i> , a fescue <i>Festuca sp.</i> , creeping bent <i>Agrostis stolonifera</i> , meadow vetchling <i>Lathyrus pratensis</i> , common vetch <i>Vicia sativa</i> , field forget-me-not <i>Myosotis arvensis</i> , lesser trefoil <i>Trifolium dubium</i> , rockery willowherb <i>Epilobium pedunculare</i> and daisy <i>Bellis perennis</i> .	No	No
g3c other neutral grassland, 106	0.08	Poor	At the eastern extent of the Site, west of Pool Lane and immediately south of the area described above, there is an area of forb- and herb-rich grassland. This habitat is moss-dominated with red fescue <i>Festuca rubra</i> as a frequent grass	No	No

Habitat, Secondary Codes	Area (ha)/ Length (m)	Condition	Summary Description	HPI?	Irreplaceable?
			species (Photograph 3). Other species recorded include creeping cinquefoil <i>Potentilla reptans</i> , common bird's foot-trefoil, daisy, field forget-me-not, yarrow <i>Achillea millefolium</i> , cut-leaved crane's bill <i>Geranium dissectum</i> , mossy stonecrop <i>Crassula tillaea</i> , common mouse-ear <i>Cerastium fontanum</i> , common ragwort <i>Jacobaea vulgaris</i> and common field-speedwell <i>Veronica persica</i>		
g3c other neutral grassland	0.74	Moderate	In the central area of Stanlow there is an area of moderate condition other neutral grassland. This parcel is primarily within the Survey Area, however, the eastern edge of this grassland protrudes into the Site boundary. This grassland is composed of Fescue, cocksfoot, creeping thistle, curled dock <i>Rumex crispus</i> , common vetch and hoary willowherb.	No	No
g4 modified grassland, 10, 106	0.49	Poor	At the northern extent of the Site, directly south of the Oil Sites Road, north of the large woodland parcel, there is an area of mown amenity grassland with scattered ornamental shrub (Photograph 4). Species recorded include Yorkshire-fog, a fescue, perennial rye-grass <i>Lolium perenne</i>, daisy, common bird's foot trefoil, bearberry cotoneaster <i>Cotoneaster dammeri</i>, dogwood <i>Cornus sanguinea</i>, Portugal laurel <i>Prunus lusitanica</i>, holly <i>Ilex aquifolium</i> and Arctic bramble <i>Rubus arcticus</i>. At the north-western extent of the Site to the south of Oil Sites Road and south of the large woodland parcel, there is an area of mown amenity grassland dominated by perennial rye-grass (Photograph 5). Recorded species include meadow	No	No

Habitat, Secondary Codes	Area (ha)/ Length (m)	Condition	Summary Description	HPI?	Irreplaceable?
			buttercup <i>Ranunculus acris</i> , daisy, ribwort plantain and white clover <i>Trifolium repens</i> .		
g4 modified grassland, 106	0.17	Good	At the north-western tip of the Site north of Oil Sites Road, there is an area of mown modified grassland dominated by perennial rye-grass (Photograph 6). Other species recorded include meadow buttercup, daisy, ribwort plantain and white clover.	No	No
g4 modified grassland, 106	0.26	Poor	At the eastern extent of the Site, to the west of Pool Lane, there is an area of mown amenity grassland with four small sycamore trees (Photograph 7). A further area of mown amenity grassland is present to the east of Pool Lane dominated primarily by perennial rye-grass (Photographs 8). Other species recorded include Yorkshire-fog, daisy, creeping buttercup <i>Ranunculus repens</i> , creeping thistle <i>Cirsium arvense</i> , common ragwort, red clover <i>Trifolium pratense</i> , dandelion <i>Taraxacum agg</i> , hawthorn, a cotoneaster, goat willow, Arctic bramble, field horsetail and bracken <i>Pteridium aquilinum</i> .	No	No
g4 modified grassland	1.70	Poor	Across the Survey Area, a number of small parcels of poor condition g4 grassland were present in the form of road verges and amenity grasslands. Species typically included dominant perennial ryegrass with other species such as creeping buttercup, white clover, dandelion, ribwort plantain and daisy being present.	No	No
w1g other broadleaved	9.16	Moderate	Along the northern boundary of the site, there is a large woodland parcel along the existing railway and roadside (Photograph 9). The canopy is dominated by birch and	No	No

Habitat, Secondary Codes	Area (ha)/ Length (m)	Condition	Summary Description	HPI?	Irreplaceable?
woodland, 30, 217, 511, 518			willow, with an understorey largely composed of willowherb, nettle and bramble. The soils appear aggregated, suggesting disturbance and supporting the development of secondary woodland which is naturally colonising the previously un-wooded site. Historical evidence suggests there may have been two lines of trees flanking the railway, which have since succeeded into a more continuous block of woodland. Other species recorded include silver birch, pedunculate oak <i>Quercus robur</i>, goat willow <i>Salix caprea</i>, butterfly-bush <i>Buddleja davidii</i>, a conifer (unidentified), rosebay willowherb, herb-robert <i>Geranium robertianum</i>, creeping thistle, common nettle <i>Urtica dioica</i>, Arctic bramble, cock's foot, a St. John's wort <i>Hypericum sp.</i>, Yorkshire fog and false oat-grass <i>Arrhenatherum elatius</i>. A watercourse is located outside of the 30m buffer and appears to be culverted beneath the entirety of the Site flowing in a south-eastly direction.		
w1g other broadleaved woodland	1.73	Moderate	At the north-eastern extent of the Site, north of the Oil Sites Road there is a smaller area of younger woodland (Photograph 10) within which sycamore is the dominant and most abundant species. Other species recorded include hawthorn, wild cherry, ash <i>Fraxinus excelsior</i> , pedunculate oak and Arctic bramble.	No	No
w1g other broadleaved woodland	0.23	Poor	At the north-eastern extent of the Site (including within the 30m buffer), to the east of Pool Lane and north of the roundabout, there is a small parcel of roadside woodland (Photograph 11). Species recorded include a whitebeam <i>Sorbus sp.</i> pedunculate oak, hawthorn, round-leaved dog-	No	No

Habitat, Secondary Codes	Area (ha)/ Length (m)	Condition	Summary Description	HPI?	Irreplaceable?
			rose <i>Rosa obtusifolia</i>, Arctic bramble, cleavers <i>Galium aparine</i>, cock's foot and elder <i>Sambucus nigra</i>. South of the roundabout, there is a further parcel of woodland comprising broadly the same assemblage of species as that recorded within the northern woodland parcel (Photograph 12). To the west of Pool Lane, there is a small parcel of woodland with bare aggregated soil (Photograph 13)		
w1g other broadleaved woodland, 29, 516	1.89	Moderate	At the north-eastern edge of the Site, to the east of Pool Lane, there is a narrow parcel of woodland adjoining an adjacent field (Photograph 14). This area is relatively species-rich, and appears to comprise plantation woodland due to the prevalence of non-native species, with a footpath running through it. Species recorded include horse-chestnut <i>Aesculus hippocastanum</i>, large-leaved lime <i>Tilia platyphyllos</i>, pedunculate oak, sycamore, silver birch, hawthorn, ivy <i>Hedera helix</i>, Arctic bramble, garlic mustard <i>Alliaria petiolate</i>, cow parsley <i>Anthriscus sylvestris</i>, cleavers, broadleaved dock <i>Rumex obtusifolius</i>, holly, hogweed <i>Heracleum sphondylium</i>, wild cherry, wood avens <i>Geum urbanum</i>, cock's foot, rough meadow-grass <i>Poa trivialis</i> and beech <i>Fagus sylvatica</i>.	No	No
w1g other broadleaved woodland, 29	0.16	Poor	At the north-eastern extent of the Site, to the west of Pool Lane (near the TSP buildings, there is a hazel dominated woodland parcel (Photograph 15). This area is likely to have originated as planted scrub that has since matured into woodland, now characterised by a sparse, largely bare understorey. Other species recorded include hazel <i>Corylus avellana</i>, guelder-rose <i>Viburnum opulus</i>, non-native	No	No

Habitat, Secondary Codes	Area (ha)/ Length (m)	Condition	Summary Description	HPI?	Irreplaceable?
			Franchet's cotoneaster <i>Cotoneaster franchetii</i> , ash, common chickweed <i>Stellaria media</i> and common ragwort.		
w1g other broadleaved woodland, 29, 30	0.56	Moderate	At the eastern extent of the Site, to the west of Pool Lane, there is a narrow strip of plantation woodland (Photograph 16) with evidence of some natural regeneration, bordering the road and adjacent hard infrastructure. Species recorded include sycamore, small-leaved lime <i>Tilia cordata</i>, white birch, horse-chestnut, gorse, ivy, Arctic bramble, white oak, American arborvitae <i>Thuja occidentalis</i>, cleavers and herb bennet. At the western edge of the Site, there is a narrow woodland parcel consisting of native broadleaved species, areas of bramble scrub, and ornamental shrubs, with a border of modified grassland (Photograph 17). Other species recorded include ash, white oak, white poplar <i>Populus alba</i>, Spanish broom <i>Spartium junceum</i>, holly, laurustinus <i>Viburnum tinus</i>, feijoa <i>Acca sellowiana</i>, red currant <i>Ribes rubrum</i>, escallonia <i>Escallonia macrantha</i>, gorse, Western red-cedar <i>Thuja plicata</i>, elder, Arctic bramble, common nettle, cleavers, sycamore and perennial sow-thistle <i>Sonchus arvensis</i>. At the south-western edge of the Site below the RLB, directly north of the A5117, there is a roadside woodland parcel dominated by hawthorn, with black poplar and sycamore also present (Photograph 18). The understorey is primarily composed of nettles and cleavers. This area was likely originally planted as screening for the road and has since expanded into mature woodland. Other species recorded include pedunculate oak, white poplar, ivy, Arctic bramble, common nettle, cleavers, ash, <i>Rosa sp.</i> cock's foot, hogweed,	No	No

Habitat, Secondary Codes	Area (ha)/ Length (m)	Condition	Summary Description	HPI?	Irreplaceable?
			cow parsley, common knapweed <i>Centaurea nigra</i> , false oat-grass, field horsetail <i>Equisetum arvense</i> , curled dock, creeping thistle, yarrow and beech.		
w1g other broadleaved woodland, 30	1.02	Moderate	At the south-eastern extent of the Site, to the east of Pool Lane, there is some roadside woodland (Photograph 19), only surveyed from the edge (no access to ID understorey). Species recorded include ash, sycamore, pedunculate oak, beech and wild cherry.	No	No
w1g other broadleaved woodland, 30, 517	0.54	Moderate	At the far south-eastern extent of the Site, there is an ash dominated woodland parcel (Photograph 20). This area is species rich with an understorey dominated by nettle and cleavers. Other species recorded include hawthorn, pedunculate oat, sycamore, large-leaved lime, silver birch, wild cherry, horse-chestnut, common nettle, garlic mustard, cleavers, Arctic bramble, hogweed, cow parsley, beech, elder, red campion <i>Silene dioica</i> , cock's foot, Yorkshire-fog, perennial rye-grass, hazel, rowan <i>Sorbus aucuparia</i> and dogwood.	No	No
w1g other broadleaved woodland, 30, 518, 532, 502	1.00	Moderate	At the south-eastern edge of the Site, below the RLB, there is stretch of woodland located immediately north of the A5117 (Photograph 21). Species recorded include ash, sycamore, a poplar, hawthorn, pedunculate oak, goat willow, English elm <i>Ulmus procera</i> , common nettle, cleavers, bracken <i>Pteridium aquilinum</i> , Arctic bramble, rosebay willowherb, meadow buttercup, a balsam <i>Impatiens spp.</i> common chickweed, cock's foot, hogweed, Yorkshire-fog, common ragwort, herb-robert, creeping thistle, ribwort plantain and common reed.	No	No

Habitat, Secondary Codes	Area (ha)/ Length (m)	Condition	Summary Description	HPI?	Irreplaceable?
w1g other broadleaved woodland, 30, 510, 521	3.83	Moderate	Within the northern extent of the Site, there is a large area of goat willow and silver birch woodland, composed predominantly of young and semi-mature trees (Photograph 22). The understorey is dense and scrubby, largely consisting of willow and birch regeneration with some Arctic bramble present. Occasional pedunculate oak saplings are also noted. Ground flora is generally sparse, although some glades support species such as rosebay willowherb and creeping buttercup. Localised areas of common reed and hard rush <i>Juncus inflexus</i> are also present, indicating wetter ground conditions in parts. Other species recorded include butterfly-bush and creeping thistle. There is also a pipe running through the woodland (TN2).	No	No
w1g other broadleaved woodland, 10, 37, 57	0.85	Poor	An area of woodland along the southern boundary of the Site. It appeared young and self-set, having succeeded atop disturbed ground comprised of industrial debris of rock, metal, stone and dirt, which was present in the often bare ground layer. Species present comprised dominant sycamore, occasional birch, elder, beech, and rare hawthorn. In addition to frequent bare ground, the ground layer featured abundant Spanish bluebell <i>Hyacinthoides hispanica</i> , frequent nettle and cleavers, occasional male fern <i>Dryopteris filix-mas</i> , and rare wood avens.	No	No
w1g other broadleaved woodland	1.54	Moderate	Small areas of moderate condition other broadleaved woodland were present across the Survey Area, namely in the eastern and western extents. Species typically included	No	No

Habitat, Secondary Codes	Area (ha)/ Length (m)	Condition	Summary Description	HPI?	Irreplaceable?
			sycamore, small-leaved lime, white birch, horse chestnut, hawthorn and white oak.		
W1f Lowland mixed deciduous woodland, 37, 57	0.31	Poor	This woodland parcel was present to the south of the Survey Area and featured frequent hawthorn, ash, pedunculate oak and willow, with nettle and bare ground abundant throughout the understorey. This parcel was of a similar basic structure to the w1g woodland. However, the overall species richness was greatly reduced.	Yes	No
h2a6 other native hedgerow, 116, 516	425m	Moderate	Along the western side of Pool Lane, a hawthorn-dominated hedge has been planted to provide screening between the Site and the adjacent road (Photograph 23). The hedge has a largely bare understorey with limited ground flora present beneath the canopy.	No	No
h2a6 other native hedgerow, 116, 516, 11	458m	Moderate	Along the eastern side of Pool Lane, a hawthorn-dominated hedge is present adjacent to the edge of the woodland located to its east (Photograph 24). The hedge supports a similar understorey composition to that of the adjacent woodland with scrub and ground flora contiguous between the two habitats. Other species recorded include sycamore, ash and blackthorn <i>Prunus spinosa</i> .	No	No
h2a6 other native hedgerow	361m	Moderate	Along the eastern side of Pool Lane further south, there is a hawthorn-dominated hedgerow with no notable gaps and a well-developed understorey throughout its length (Photograph 25).	No	No
h3d bramble scrub	0.5	n/a	At the north-eastern tip of the Site, there is a large area of bramble scrub (Photograph 26). Species recorded include Arctic bramble, common nettle and cock's foot.	No	No

Habitat, Secondary Codes	Area (ha)/ Length (m)	Condition	Summary Description	HPI?	Irreplaceable?
h3h mixed scrub	3.94	Moderate	At the north-western tip of the site, is an area of dense scrub dominated primarily by willow and birch, with occasional buddleia <i>Buddleia davidii</i> and hawthorn present. Species recorded within this area include goat willow, buddleia, silver birch, common reed <i>Phragmites australis</i>, hawthorn <i>Crataegus monogyna</i>, soft rush <i>Juncus effusus</i>, Arctic bramble, sycamore <i>Acer pseudoplatanus</i> and gorse <i>Ulex europaeus</i>. At the northern extent of the Site, north of Oil Sites Road there is a small area of mixed birch, willow and likely bramble, (Photograph 27) however, this area was not accessed from within.	No	No
h3j willow scrub, 32, 504, 518	0.16	Poor	Within the northern part of the Site, south of Oil Sites Road there is dense scrub (Photograph 28) dominated by grey willow <i>Salix cinerea</i>, with scattered non-native white birch <i>Betula albo-sinensis</i>, white oak <i>Quercus alba</i> and wild cherry <i>Prunus avium</i>, as well as occasional buddleia. The presence of non-native white birch A linear pipeline passes through the area, creating localised breaks in the understorey and resulting in areas of more open structure. Other species recorded include butterfly-bush, Arctic bramble, rosebay willowherb <i>Chamaenerion angustifolium</i> and hawthorn.	No	No
c1b temporary grass and clover leys	0.16	n/a	At the north-eastern tip of the Site, there is an arable field supporting a managed grass ley at the time of survey, with evidence of ongoing agricultural management through mowing and/or cutting. The survey was undertaken from the field margin only due to access restrictions. Therefore, species composition within the field could not be confirmed.	No	No

Habitat, Secondary Codes	Area (ha)/ Length (m)	Condition	Summary Description	HPI?	Irreplaceable?
c1 arable and horticulture	1.77	n/a	At the eastern edge of the Site, east of Pool Lane, there is an active arable field comprising recently worked bare ground. No crop establishment was visible at the time of survey, indicating recent cultivation or preparation for sowing. A further parcel of cropland is located immediately south of the above field, where early crop establishment was evident at the time of survey.	No	No
u individual trees	N/A	Poor	At the eastern extent of the Site, east of Pool Lane there are two small urban trees, comprising one sycamore and one wild cherry (Photograph 29). Within the northern central extent of the Site, there is an area of mixed ornamental scrub too small to map as a distinct polygon feature (Photograph 30).	No	No
u individual trees	N/A	Moderate	At the north-western extent of the Site there is a small but mature hawthorn tree situated adjacent to the roadside within an area of sparsely vegetated urban land to the east of this feature there is a semi-mature alder located on heavily modified urban ground supporting sparse ruderal vegetation (Photograph 31). The substrate is highly disturbed and shows clear evidence of historic industrial influence. Further to the east of these trees there is a linear grouping of medium sized silver birch trees, with stem diameters ranging from approximately 7.5 to 30cm (Photograph 32). To the eastern edge of the Site, north of Link Road, just within the 30m buffer zone, there is an individual mature sycamore tree located on the field margin adjacent to the roadside.	No	No

Habitat, Secondary Codes	Area (ha)/ Length (m)	Condition	Summary Description	HPI?	Irreplaceable?
			Within the southern extent of the Site, to the east of the Boiler house, there is a medium-sized semi-mature goat willow located within an area of derelict land (Photograph 33).		
u individual trees, 34, 203	N/A	Good	At the eastern extent of the site, east of Pool Lane there are twenty black poplars and seventeen hawthorn trees running parallel with the adjacent hedgerow (Photograph 34).	No	No
u individual trees, 200	N/A	Moderate	At the eastern extent of the Site, west of Pool Lane there are four small sycamores within a g4 grassland (Photograph 35). At the south-eastern tip of the Site, there is a roadside linear grouping of fourteen lime comprising ten medium-sized and four small trees (Photograph 36).	No	No
u1b5 buildings	2.73	n/a	To the centrally northern extent of the Site, south of Oil Sites Road, there is an abandoned brick building with smashed windows and a felt covered roof (Photograph 37). Within the northern central extent of the Site, there is a metal corrugated industrial building (Photograph 38), a brick building structure with a corrugated metal roof (Photograph 39). Another building is located to the east, comprising a large welfare building/warehouse of brick construction with a metal-clad roof (Photograph 40). Scaffolding was present around this building at the time of survey, indicating that maintenance or redevelopment works may be ongoing. Within the southern-central extent of the Site, there are a number of industrial buildings present, including two metal-clad buildings (Photograph 41 and Photograph 42 respectively), a large warehouse of brick and metal construction with a brick base and metal sheet cladding	No	No

Habitat, Secondary Codes	Area (ha)/ Length (m)	Condition	Summary Description	HPI?	Irreplaceable?
			(Photograph 43), a metal warehouse located to the east with breeze block walls and single-skin metal cladding (Photograph 44), and a further brick and metal warehouse building located to the south (Photograph 45). Also, within this area is the Boiler house (Photograph 46), which is scheduled to be demolished. The Demineralisation plant, also due to be demolished comprises a metal and asbestos clad warehouse structure with machinery inside (Photograph 47). Further to the east of these buildings, there are three additional structures present, including a brick-built building with a metal roof (Photograph 48), a refinery infrastructure building (Photograph 49), and a further brick-built structure with what appears to be a timber roof (Photograph 50).		
u1c artificial unvegetated and unsealed surface	5.07	n/a	At the northern extent of the Site, north of Oil Sites Road, there is an area of unsealed ground with minimal vegetation cover, preventing identification of plant species. At the time of the survey, the area was heavily waterlogged toward the roadside and may historically have functioned as a drainage ditch. However, it appears to have been infilled and no longer functions as an active drainage feature (Photograph 51). At the southern-central extent of the Site there are two areas of unsealed surface with buddleia, bird's-foot trefoil, willowherb and thistle (Photograph 52 and Photograph 53 respectively).	No	No
uf1 sparsely vegetated urban land	4.79	n/a	At the northern extent of the Site, south of Oil Sites Road, there is a former station car park comprising neglected, vacant and derelict land (Photograph 54). The area shows evidence of prolonged disuse with limited varied vegetation,	No	No

Habitat, Secondary Codes	Area (ha)/ Length (m)	Condition	Summary Description	HPI?	Irreplaceable?
			species include silver birch, goat willow, sharp rush <i>Juncus acutus</i> , common bird's foot trefoil, bristly oxtongue and Arctic bramble.		
uf1 sparsely vegetated urban land, 81	1.62	n/a	To the north-central extent of the Site, there is a large area of sparsely vegetated land with extensive rubble and areas of ongoing deconstruction works present in parts. Buddleia is widespread throughout the area, with scattered patches of willow and birch also recorded (Photograph 55). To the northern extent of the Site, south of the large woodland parcel, there is a large area of mature vegetation growing through concrete hardstanding. The area contains extensive open ground; however, it was only surveyed from behind the perimeter fence, with no access available within the parcel (Photograph 56).	No	No
u1f sparsely vegetated urban land, 847	0.40	n/a	At the south-eastern extent of the Site, west of Pool Lane, there is an area of built environment with introduced scrub and ornamental planting (Photograph 57). Species recorded include cherry laurel <i>Prunus laurocerasus</i> , red-osier dogwood <i>Cornus sericea</i> , a cotoneaster and Norway maple <i>Acer platanoides</i> .	No	No
u1b developed land, sealed surface	81.78	n/a	The majority of the Site comprises hardstanding associated with the refinery infrastructure, including extensive areas of built surfaces and industrial installations (Photograph 58).	No	No
r1g other standing water, 50	0.02	Poor	Within the north-eastern extent of the Site, there is a small area of concrete-banked draining ditch adjacent to the road (Photograph 59). Bulrush <i>Typha latifolia</i> was abundant within	No	No

Habitat, Secondary Codes	Area (ha)/ Length (m)	Condition	Summary Description	HPI?	Irreplaceable?
			the channel, although vegetation was otherwise largely absent.		
r2b other rivers and streams, 49, 50	0.04	Poor	At the southern end of the Site, there is a slow-flowing stream running from west to east (Photograph 60). The channel is approximately 1m wide and estimated to be c.10cm deep. Nettle and ruderal weed species encroach to the water's edge. A debris line and mud deposits on vegetation suggest significant fluctuations in water depth during periods of higher flow, The mapped length is estimated due to access limitations.	No	No

3.4 Protected and Priority Species Assessment

Desk Study

3.4.1 Records of protected or priority species relevant to the locality of the Site from the last 10 years are summarised in **Table 3.6** below.

Table 3.6 Protected, Priority and Invasive Non-Native Species

Species/Species Group	No. records	Most Recent	Closest Record (from central GR)
Bats			
Common pipistrelle <i>P. pipistrellus</i>	25	2025	560m to W
Soprano pipistrelle <i>P. pygmaeus</i>	18	2025	1.1km to NE
Brown long eared bat <i>Plecotus auritus</i>	1	2017	1.8 to E
Myotis species <i>Myotis sp.</i>	3	2021	1.1km to NE
Daubenton's bat <i>M. daubentonii</i>	2	2016	1.8km to SW
Natterer's bat <i>M. nattereri</i>	1	2017	1.7km to E
Noctule bat <i>Nyctalus noctula</i>	10	2025	1.7km to E
Mammals			
Badger <i>Meles meles</i>	35	2024	695m to S
Water vole	70	2018	1.17km to SW
Other Priority Species mammals: European hedgehog <i>Erinaceus europaeus</i>	1	2022	1.1km to SW
Birds			
Birds (Schedule 1 on Wildlife and Countryside Act, 1981 (as amended))			
Barn owl	13	2025	1.6km to NE
Black-tailed godwit	25	2023	1.8km to NE
Cetti's warbler <i>Cettia cetti</i>	28	2023	1.1km to SW
Fieldfare	16	2022	711m to SE
Green sandpiper	2	2020	1.5km to SW
Kingfisher	8	2024	1.8km to NE

Species/Species Group	No. records	Most Recent	Closest Record (from central GR)
Marsh harrier	15	2025	1.1km to SW
Red kite <i>Milvus milvus</i>	2	2024	1.8km to NE
Redwing <i>Turdus iliacus</i>	41	2023	1.7km to SW
Birds (Species of Principal Importance (SPI)s, Local Biodiversity Action Plan (LBAP) species, and BoCC amber and red listed designations)			
12 species of red and amber listed birds including: Black-tailed Godwit, curlew <i>Numenius arquata</i> , Greenfinch <i>Chloris chloris</i> , grey wagtail <i>Motacilla cinerea</i> , herring gull <i>Larus argentatus</i> , house sparrow, Lapwing, mistle thrush <i>Turdus viscivorus</i> , reed bunting, skylark, song thrush, starling.	473	2025	719m to SE
Amphibians			
Great crested newt <i>Triturus cristatus</i>	30	2025	1.86km to W
Invertebrates (Section 41 of the Natural Environment and Rural Communities -NERC (2006))			
Blood-vein <i>Timandra comae</i>	8	2023	997m to S
Cinnabar moth <i>Tyria jacobaeae</i>	12	2025	948m to S
Dark-barred Twin-spot Carpet <i>Xanthorhoe ferrugata</i>	1	2023	1.55km to SW
Garden Tiger <i>Arctia caja</i>	2	2024	1.39km to SE
Grey Dagger <i>Acronicta psi</i>	1	2024	1.98km to S
Shaded Broad-bar <i>Scotopteryx chenopodiata</i>	4	2023	1.13km to SW
Plants			
Black poplar <i>Populus nigra subsp. betulifolia</i>	6	2022	1.22km to SW
Invasive non-native species (INNS)			
Grey squirrel <i>Sciurus carolinensis</i>	4	2026	927m to E
Orange Balsam <i>Impatiens capensis</i>	6	2024	1.1km to SW

Suitability Assessment

- 3.4.2 The potential for the Site and surrounding habitat to support legally protected and/or priority species is discussed for each species/species group below.

Bats

- 3.4.3 The desk study returned sixty records of bats, comprising seven species, within 2km of the Site. The closest record was for two common pipistrelle foraging approximately 560m to the west of the Site Boundary in October 2021.
- 3.4.4 The previous PEA, PRA and GLTA (WSP, 2025) identified two buildings (b1 and B7) with Low suitability for supporting roosting bats. One tree (T1) within the Survey Area was assessed as having suitability to support a roosting bat. No other trees or building were present during the PEA Survey Area which had features to support roosting bats.
- 3.4.5 The Site was assessed as having limited suitability for foraging and commuting bats within the operational areas of the Site. However, the larger parcels of woodland and scrub along the boundaries of the Site provide habitat suitable for supporting foraging and commuting bats, particularly along Oil Sites Road, Pool Lane and the A5117.
- 3.4.6 A PRA was undertaken for the TENKO Warehouse, Old Demineralisation Plant and MP Boiler House. All structures were metal construction consisting of operational refinery infrastructure. Each building was assessed as having negligible suitability for roosting bats, with no PRFs identified and a high level of existing background disturbance, see **Table 3.7**.

Table 3.7 PRA Suitability

Building	Description	Potential Roost Features	Suitability	Picture Number
Demineralisation Plant	Metal warehouse housing active refinery infrastructure.	None	Negligible	50
TENKO Warehouse	Metal warehouse housing active refinery infrastructure.	None	Negligible	51
MP Boiler House	Active boiler house, metal structure	None	Negligible	52

- 3.4.7 Several bridges were identified at the north of the Site associated with the disused railway. One bridge offers moderate suitability for use as a roost, while the three railway bridges crossing the road provide high suitability for roosts. Further dusk emergence surveys are therefore recommended to confirm roost presence.
- 3.4.8 Due to time constraints only a small number of buildings were formally subject to a PRA. Two buildings at the northern end of the Site and one building at the centre of the Site were assessed as having low bat potential. In addition, an outbuilding in poor condition at the north-western end of the Site was assessed as having moderate bat potential. **Volume 1, Chapter 2 – The Proposed Development** details the specific structures to be demolished and each building requiring removal should be subject to a PRA.
- 3.4.9 Overall, the operational Site had negligible suitability to support commuting and foraging bats due to the level of disturbance from the industrial activity present at the Site. The mature trees and woodland parcels within the RLB require a further GLTA survey to identify the suitability of trees to support roosting bats.

Badger

- 3.4.10 The desk study returned thirty-five records of badger, within 2km of the Site. The closest record of a badger was sighted 13.52m to the south of the Site in October 2018.
- 3.4.11 The previous badger assessment (PEA, 2025) identified an area of deciduous woodland within the south-west corner of the Survey Area comprising bramble scrub alongside the watercourse, which was considered suitable for sett construction, foraging and commuting activity. During the previous habitat survey, mammal pathways were recorded through the modified grassland to the south and east of the site. In addition, sett entrances were observed within woodland adjacent to Gale Brook and also within the woodland to the south of the Survey Area. Badgers are therefore considered likely to be present within and adjacent to the Site.
- 3.4.12 Woodland parcels in the less frequently disturbed areas of the Site, located to the northwest, east and south/southeast, are suitable for badgers. A potential badger sett entrance was identified within woodland associated within an arable field to the east of Pool Lane. Additional badger field signs were recorded within woodland parcels to the northwest and south/southeast of the Site, specifically push-throughs beneath the fence line. Badgers are therefore considered likely to be present and are a consideration to the Proposed Development. A full badger survey is recommended where works are going to be impacting these woodlands.

Otter

- 3.4.13 The desk study did not return any records for otter within 2km of the Site.
- 3.4.14 Cavities within the root system of trees are commonly used by otter for holts or places of shelter. There is a lack of mature bankside trees along Gale Brook and limited connectivity to the wider catchment or estuary habitats to the north from the section of Gale Brook located in the Survey Area. As such it is considered that the section of Gale Brook and the drainage (concrete) channel do not offer habitat suitable to support otter. No field signs including footprints, spraints, feeding remains, holts or dens were found during the field survey. It is highly unlikely that otter would establish holts or dens within such a disturbed area and are not considered further in this assessment.

Water Vole

- 3.4.15 The desk study returned nineteen records of water vole, within 2km of the Site. The closest record was 1.1km to the southwest of the Site in April 2021. Riparian mammal surveys conducted to inform the HyNet North West Carbon Dioxide Pipeline Development Consent Order (DCO) application in 2021 and 2022 (data available online on the National Infrastructure Planning portal) confirmed the potential presence of water vole burrows on Gale Brook approximately 1km south (upstream) from the Site.
- 3.4.16 The previous water vole assessment (WSP, 2025) identified Gale Brook as providing suitable aquatic habitat for this species. During the UKHab survey, suitable habitat for water vole was recorded along the banks of Gale Brook, and a potential water vole burrow was observed on the eastern bank. It is considered likely that there is potential for water vole to be present within this area of aquatic habitat and are a consideration for the Proposed Development. A survey for water vole field signs was undertaken in June 2024 on Gale Brook. This involved searching of the banks and margins of Gale Brook for field signs of water vole in line with current good practice guidance with a single potential water vole burrow being identified.
- 3.4.17 The field survey identified a ditch at the northern end of the Site; however, this was dry at the time of this survey and therefore currently offers limited potential for water vole. A further ditch was identified along the A5117 which was assessed as having 'Suitable but Poor' suitability for water vole due to the channel type and vegetation present (Dean, 2021). Therefore full water vole surveys may be required dependent on proposed works in these areas.

Birds

- 3.4.18 The desk study returned records for twenty-one species of protected and notable birds, within 2km of the Site, with the closest recorded being a single fieldfare, approximately 711m to the southeast of the Site in March 2018.
- 3.4.19 The previous habitat survey (PEA, 2025) identified an area within the south-western corner of the Survey Area that provides suitable nesting habitat for common bird species. In addition, Gale Brook may provide suitable habitat for species associated with watercourses. Birds are therefore considered likely to be present within the Survey Area.
- 3.4.20 During the Site visit, a single peregrine was observed soaring near a large chimney at the north-western end of the Site. A single kestrel was also observed hunting in this area. A further assessment of the Site to identify if peregrines are nesting on site is required to inform the impact assessment and mitigation for future works.
- 3.4.21 Small areas of woodland are present within the Site, particularly at the southern end, which could support populations of nesting birds. Birds may also nest within built structures including the timber or metal structures within the Site, including storage tanks and metal towers. Pre-works nesting bird checks are required for vegetation clearance if carried out within nesting bird season, typically March to September inclusive.

Reptiles

- 3.4.22 The desk study did not return any records for reptiles within 2km of the Site.
- 3.4.23 The majority of the Site is considered highly unlikely to support reptile populations due to the extensive areas of artificial sealed surfaces and the limited extent of semi-natural habitat, which is largely isolated and lacks connectivity with surrounding habitats. However, within the woodland at the south of the Site, areas of rubble were identified that are suitable for providing potential reptile refugia.

Great Crested Newt

- 3.4.24 The desk study returned thirty records of amphibians, within 2km of the Site. The closest record was for twenty-five adult female great crested newt (GCN) identified via torch search, 1.86km to the west of the Site in October 2021.
- 3.4.25 The previous GCN assessment (PEA, 2025) did not identify any suitable habitat for GCN within the Site. Furthermore, the presence of significant barriers to amphibian movement limits the likelihood of dispersal into the Survey Area. GCN were therefore considered likely absent from the Site.

- 3.4.26 During the field study, two ditches were identified; one to the north of the Site (**Photograph 64**), which was dry at the time of the survey, and one to the south (**Photograph 65**), which is likely to be shallow during the summer but retains some water and is connected to the wider ditch and watercourse network. As the ditch contains flowing water, it is unlikely to provide suitable habitat for GCN breeding.

Invertebrates

- 3.4.27 The desk study returned twenty-eight records of invertebrates, within 2km of the Site. The closest record was for cinnabar moth, 948m to the south of the Site in June 2023. A number of common and widespread species were also recorded.
- 3.4.28 Habitats within the Site are largely unsuitable for invertebrates due to the dominance of artificial sealed surfaces. However, semi-natural habitats are present within the Site, including woodland, scrub and grassland. In addition, a small number of areas comprising artificial unsealed substrates support ruderal plant species such as buddleia, common bird's-foot trefoil, willowherb and thistle *Cirsium spp*, which provide some limited habitat for common widespread invertebrate species.

Plants

- 3.4.29 The desk study returned six records of protected plant species, within 2km of the Site. The closest record was for black poplar, designated as a priority species under the Cheshire region BAP, 1.22km to the southwest of the Site in 2022.
- 3.4.30 Plant species recorded from the Site visits are shown in **Table 3.5** and were common and widespread species of woodland, grassland and scrub, of no conservation concern.

Invasive Non-Native Plant Species

- 3.4.31 The desk study returned six records for non-native plant species, within 2km of the Site. The closest record was for orange balsam, 1.1km to the southwest of the Site in July 2023. Cherry laurel was also observed in the eastern extent of the Site, adjacent to office buildings.
- 3.4.32 The previous habitat survey included observations of the non-native species cotoneaster and buddleia, which were recorded across the Site.

Invasive Non-Native Animal Species

- 3.4.33 The desk study returned four records for invasive non-native animal species, within 2km of the Site. The closest record was for two grey squirrels, 927m to the east of the Site in January 2026.
- 3.4.34 No invasive non-native (Schedule 9) species were recorded during the surveys.

4. Key Ecological Considerations, Opportunities and Recommendations

4.1 Key Ecological Considerations

4.1.1 **Table 4.1** below presents the key ecological considerations, recommendations, mitigation and opportunities for enhancement that are relevant to the Proposed Development, as drawn from the results section.

Table 4.1 Preliminary Considerations, Recommendations, Mitigations and Opportunities for Enhancement

Recommendation	Action	Seasonal Constraints
Avoidance		
Retain and protect habitats	The Proposed Development should be designed to retain and protect important habitat such as deciduous woodland and potential Open Mosaic Habitat on Previously Developed Land (OMHPDL) within and adjacent to the Proposed Development where possible. Appropriate buffer zones should also be retained or created, where feasible, to protect HPI from indirect effects associated with construction and operation. These buffer zones should be at least 10m from habitats to protect them from direct impacts such as ground compression. Where the direct loss of HPI woodland will occur this must be suitably offset.	As part of project design.
Further survey & assessment		
Ground Level Tree Assessment (GLTA) for roosting bat suitability.	A GLTA of trees within woodland parcels and across the Site that could be subject to direct or indirect disturbance from a distance of 30m. This will inform the need for aerial tree surveys or dusk emergence surveys.	GLTAs are not seasonally constrained. Aerial tree surveys or dusk emergence surveys that may be necessary for follow up surveys must be undertaken between May and September and are optimal between May and August. All surveys require a three-week gap in between each survey visit and must be undertaken in appropriate weather conditions.

Recommendation	Action	Seasonal Constraints
Badger survey	Woodland parcels along the south of Oil Sites Road and east of Pool Lane are suitable sett building habitat, with a single sett entrance recorded in the Pool Lane woodland. Sett entrances were also observed within woodland adjacent to Gale Brook and also within the woodland to the south of the Survey Area. Due to the mobile nature of badgers, both areas require a pre-commencement badger walkover survey to assess the presence of badgers and likely impacts of future developments.	Badger surveys are not seasonally constrained. However, the best time to survey for badger activity is generally autumn through to early spring (September–April) when vegetation is less dense and field signs are easier to detect.
Water vole survey	The watercourse recorded along the south of the Survey Area was classified as having ‘suitable but poor’ suitability for water vole. Water vole are known to be present within the wider area. Therefore, it is recommended that water vole surveys are undertaken along the section of within the Survey Area plus 200m upstream and downstream.	Optimal survey season is from mid-April to late September, coinciding with their breeding season when they are most active and vegetation is developed. Best practice guidance recommends two visits where there is a high likelihood of water voles being present: one early (mid-April to June) and one late (July to September).
Pre-clearance checks for nesting birds	Scrub and woodland habitat present within the Survey Area provides suitable habitat for nesting birds. Tall infrastructure provides suitable nesting locations for peregrine. All wild birds are protected during nesting and if active nests are present within the works areas, they should be protected by the establishment of suitable exclusion zones around the nest site, which should remain in place until the young have fledged and the nest is no longer active.	Pre-clearance checks will be required if vegetation removal is to be undertaken during the bird breeding season (normally between March and September inclusive). Vegetation clearance can be undertaken outside of this period without the need for specific pre-clearance checks for nesting birds. Checks must be completed as close to commencement of works as possible. No more than 48 hours before.

Recommendation	Action	Seasonal Constraints
	Peregrine are also Schedule 1 species and receive further protection while nesting which can be outside the usual nesting season.	
Designated Sites: HRA screening assessment will be required due to the proximity of internationally designated sites.	A HRA Stage 1 Screening assessment should be undertaken to determine if the Proposed Development has the potential to result in Likely Significant Effects upon qualifying features of the internationally designated sites surrounding the Proposed Development. Namely, Mersey Estuary SPA and Ramsar site. The results of the screening would determine whether significant effects are likely or if additional mitigation is required which would be detailed within a Stage 2: Appropriate Assessment.	Required prior to DCO application.
BNG assessment	The Proposed Development is subject to DCO requirements around BNG, which are expected to become mandatory from November 2026. Therefore, it should be designed to achieve BNG, guided by assessments using the Biodiversity Metric.	Iterative assessments using the Biodiversity Metric and the BNG Good Practice Principles (CIEEM, CIRIA, ISEP, 2019) and BS8683:2021 should be undertaken throughout the development of the scheme to ensure it is designed to achieve BNG. Submission of a Biodiversity Metric showing habitats on Site is required for a DCO application.
Ecological Impact Assessment (EclA)	An EclA must be carried out and reported using the results of the above recommended surveys, to assess likely impacts of the Proposed Development.	Required prior to DCO application.
Mitigation and compensation		
Minimise vegetation clearance	Vegetation removal should be kept to a minimum and should only be carried out strictly where required.	During construction.

Recommendation	Action	Seasonal Constraints
INNS Management Plan	An INNS Management Plan may be required and should be prepared and implemented by specialist contractors to minimise the risk of introducing or spreading invasive non-native species during construction. Measures will include appropriate biosecurity training for Site personnel and adherence to Defra's "Check, Clean, Dry" principles.	During construction.
Code of Construction Practice (CoCP)	A CoCP should be prepared to detail measures to prevent pollution, siltation, accidental damage and spillages affecting watercourses and designated sites. The CoCP will set out best-practice measures in accordance with Environment Agency (2026) and Construction Industry Research and Information Association (CIRIA, 2015) guidance, including pollution prevention, incident response and environmental monitoring procedures.	Prepared prior to construction and implemented throughout construction.
Enhancement		
To achieve a 10% net gain in biodiversity additional habitat creation will be required	The implementation of habitat creation and enhancement measures. Specifics will be outlined within the associated BNG report, however, it is anticipated that all habitat enhancement will take place off-Site.	Project design, long term management.

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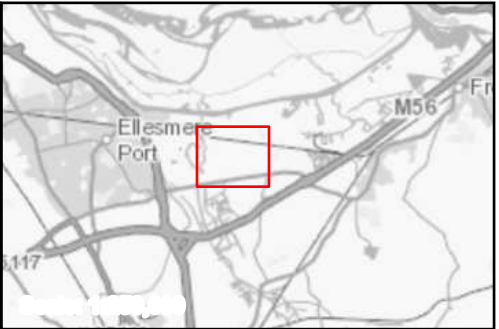
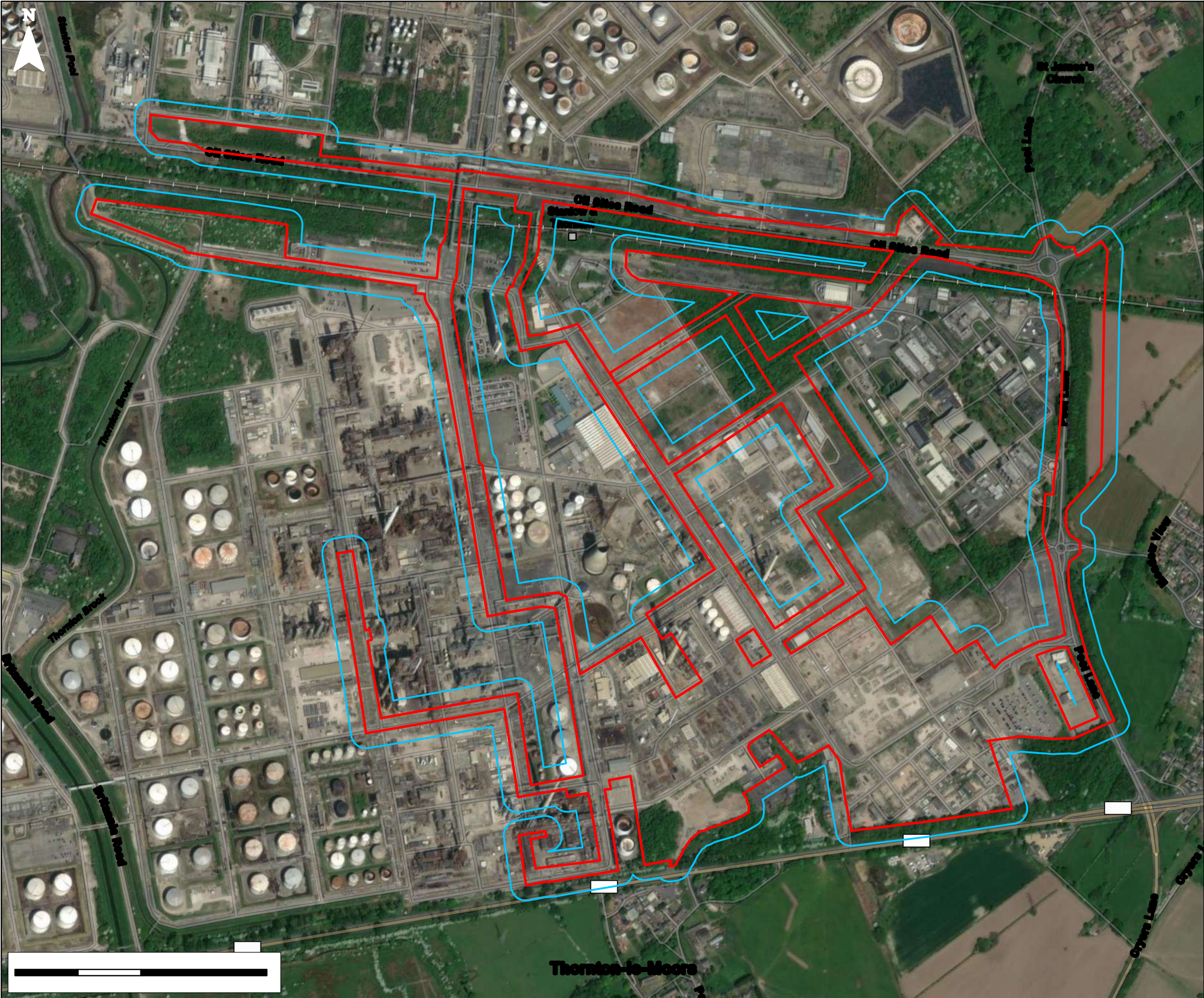


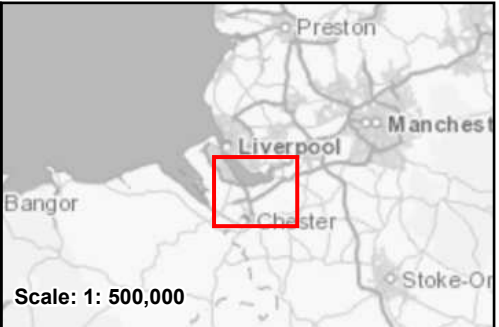
Appendices



Appendix A – Figures

- Figure 1** **Site Plan and Survey Area**
- Figure 2** **Statutory Designated Site Plans**
- Figure 3** **Non-statutory Designated Site Plans**
- Figure 4** **HPI and Ancient Woodland**
- Figure 5** **UK Habitat Plan**





Legend

- Site Red Line Boundary
- 2km Study Area
- 10km Study Area
- Special Protection Areas © Natural England
- Ramsar (England) © Natural England
- Sites of Special Scientific Interest (England) © Natural England
- Special Areas of Conservation (England) © Natural England
- Local Nature Reserves (England) © Natural England

Ancient Woodland © Natural England

- Ancient & Semi-Natural Woodland
- Ancient Replanted Woodland

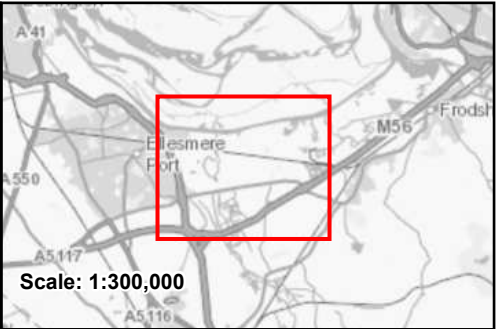
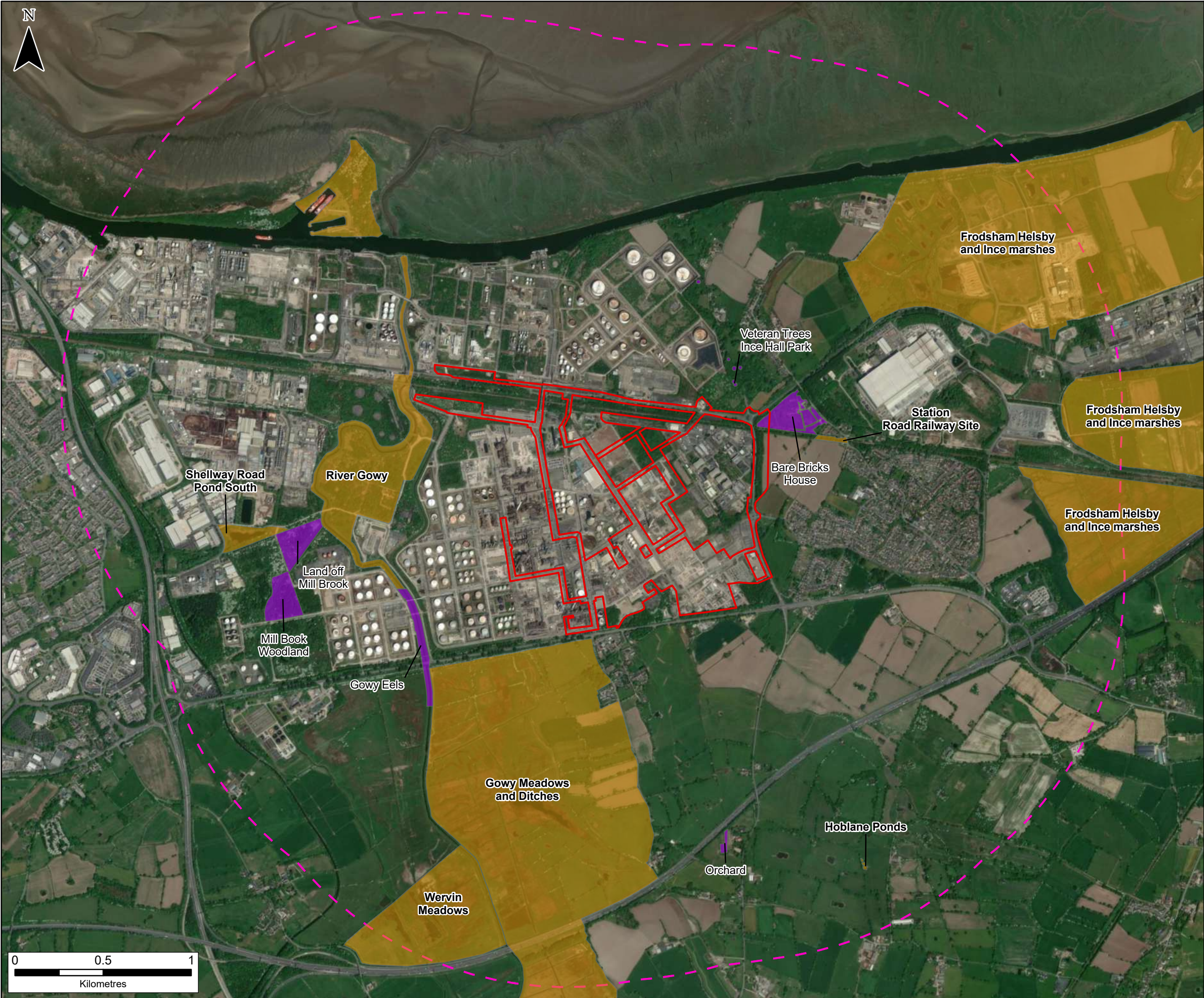
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PROJECT TITLE:
STANLOW HYDROGEN READY COMBINED HEAT AND POWER PROJECT - SCOPING REPORT

DRAWING TITLE:
FIGURE 2: STATUTORY DESIGNATED SITES PLAN

CONFIDENTIALITY		PUBLIC	
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SCALE @ A3 SIZE: 1:80,000		DATE: 12/06/2026	REVISION: P00
DRAWING NUMBER: N/A			



- Legend**
- Site Red Line Boundary
 - 2km Study Area
 - Local Wildlife Sites
 - Potential Local Wildlife Sites

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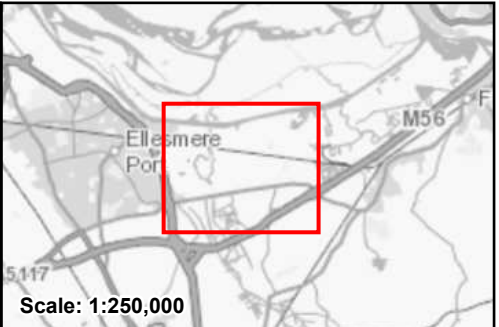
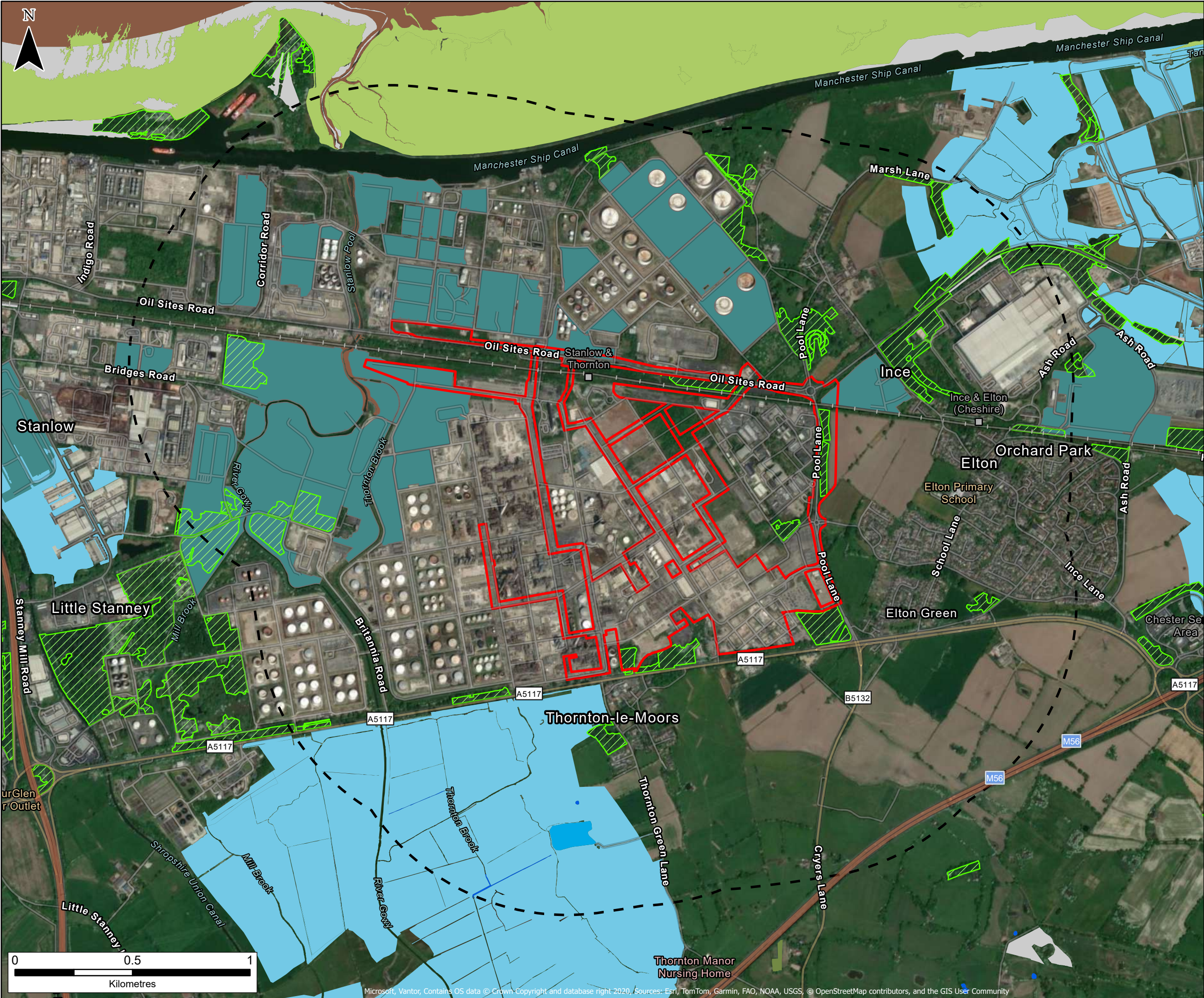
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**STANLOW HYDROGEN READY COMBINED
HEAT AND POWER PROJECT
- SCOPING REPORT**

DRAWING TITLE:
**FIGURE 3:
NON-STATUTORY DESIGNATED
SITES PLAN**

CONFIDENTIALITY
PUBLIC

DRAWN: PN	CHECKED: MH	APPROVED: LG	AUTHORISED: CL
SCALE @ A3 SIZE: 1:20,000		DATE: 21/07/2026	REVISION: P00

DRAWING NUMBER:
N/A



Legend

- Site Red Line Boundary
- 1km Study Area

Priority Habitats Inventory

- Deciduous woodland
- Coastal and floodplain grazing marsh
- Lowland meadows
- Coastal saltmarsh
- Coastal mudflats
- Ponds
- Traditional orchard
- No main habitat but additional habitats present
- Open mosaic habitat

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ESSAR ENERGY TRANSITION
EET
FUELS

PROJECT TITLE:
STANLOW HYDROGEN READY COMBINED HEAT AND POWER PROJECT - SCOPING REPORT

DRAWING TITLE:
Figure 4:
HPI and Ancient Woodland

CONFIDENTIALITY			
PUBLIC			
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DRAWING NUMBER: N/A			

Appendix B – Legislation and National Policy Context

This Annex provides an overview and context of the below legislation and national policy and guidance, as applies in England.

Legislation:

- The Wildlife and Countryside Act 1981 (as amended) (the “WCA”);
- Countryside and Rights of Way Act 2000 (the “CRoW Act”);
- The Conservation of Habitats and Species Regulations 2017 (as amended) (the “Habitats Regulations”);
- The Invasive Alien Species (Enforcement and Permitting) Order 2019
- Environment Act 2021;
- The Natural Environment and Rural Communities (NERC) Act 2006 (as amended);
- The National Parks and Access to the Countryside Act 1949
- The Protection of Badgers Act 1992; and
- The Hedgerows Regulations 1997.

National policy and guidance:

- The National Planning Policy Framework (NPPF) 2026;
- Biodiversity 2020: A strategy for England’s wildlife and ecosystem services (Defra, 2010)
- The UK Post-2010 Biodiversity Framework (2011-2020) (JNCC and Defra, 2012)
- Cheshire West and Chester Local Plan (Part One) Strategic Policies (adopted 2015)

The Wildlife and Countryside Act 1981 (as amended)

The Wildlife and Countryside Act 1981 (as amended); hereafter referred to as the ‘WCA’) is the principal mechanism for the legislative protection of wildlife in Great Britain. This legislation is the means by which the Bern Convention and (partially) the European Union Directives on the Conservation of Wild Birds (79/409/EEC) and Habitats Directive are implemented in the UK. The WCA includes provisions, amongst others, for the identification and designation of protected species; for the safeguarding and designation of Sites of Special Scientific Interest (hereafter referred to as SSSI); and for the designation of invasive non-native species and measures to control the spread of these.

Protected birds, animals and plants are listed under Schedules 1, 5, 8 respectively of the WCA. Schedule 9 lists non-native invasive species. A description of these Schedules and their meaning is provided below. Activities that would otherwise constitute an offence under this legislation may be licensed under certain circumstances by Defra or Natural England.

Birds

Under the WCA all birds, their nests and eggs (with exception of species listed under Schedule 2) are protected. It is an offence to:

- Intentionally kill, injure, or take any wild bird;
- Take or destroy an egg of any wild bird; and/or
- Damage or destroy the nest of any wild bird (whilst being built, or in use).

Birds listed under Schedule 1 of the WCA³ are afforded additional protection with regard to intentional or reckless disturbance whilst nest-building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

Protected animals

Species listed in Schedule 5 can either be fully protected or partially protected under Section 9, which makes it unlawful to intentionally or recklessly:

- Part 1: kill, injure or take;
- Part 2: possess or control (live or dead animal, part or derivative);
- Part 4 (a): damage or destruct any structure used for shelter or protection;
- Part 4 (b): disturb them in a place of shelter or protection;
- Part 4 (c): obstruct access to place of shelter or protection;
- Part 5 (a): sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative); and/or
- Part 5 (b): advertise for buying or selling.

The Environment Act 2021 enables licences to be granted under Section 16 of the WCA for reasons of over-riding public interest where there is no other satisfactory solution, and the grant of the licence is not detrimental to the survival of any population of the plant or animal species to which the licence relates. In addition, the Environment Act 2021 has amended section 10 of the WCA such that where a European Protected Species (ESP) licence is obtained under the Habitats Regulations and fully complied with, the above offences under the WCA no longer apply for that species.

Protected plants

The Act makes it an offence (subject to exceptions) to pick, uproot, trade in, or possess (for the purposes of trade) any wild plant listed in Schedule 8, and prohibits the unauthorised intentional uprooting of such plants.

³ To view the current list of Schedule 1 listed birds, visit:
<http://www.legislation.gov.uk/ukpga/1981/69/schedule/1>

Invasive species

Invasive animal species listed under Schedule 9 are prohibited from release into the wild under Section 14 of the WCA, and the Act prohibits planting or “causing to grow” in the wild of any plant species listed in Schedule 9. It should be noted that certain bird species listed on Schedule 1 of the WCA are also listed on Schedule 9 to prevent release of non-native and captive individuals, this includes barn owl, red kite, goshawk and corncrake.

SSSIs

SSSIs are subject to strict protection under the Wildlife and Countryside Act 1981 (as amended). Certain operations within SSSIs or affecting SSSIs require approval (known as assent); these are specific to each SSSI.

Countryside Rights of Way Act 2000 (CRoW Act)

The CRoW Act amended the WCA in England and Wales, strengthening the protection afforded to Sites of Special Scientific Interest (SSSI) and the legal protection for threatened species, and provides better management arrangements for Areas of Outstanding Natural Beauty (AONBs). It adds the word ‘reckless’ to the wording of the offences listed under Section 9(4) of the WCA. This alteration makes it an offence to recklessly commit an offence, where previously an offence had to be intentional to result in a breach of legislation.

Conservation of Habitats and Species Regulations 2017 (as amended) (Habitats Regulations)

The Conservation of Habitats and Species Regulations 2017 (as amended) consolidate the Conservation of Habitats and Species Regulations 2010 with subsequent amendments. The Regulations transpose Council Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive), into national law. They also transpose elements of the EU Wild Birds Directive in England and Wales. The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 made the Habitats Regulations operable from 1 January 2021 after the UK left the European Union.

European Protected Species (EPS)

All species listed under Annex IV of the Habitats Directive require strict protection and are known as European Protected Species (EPS). Under Regulation 43 of the Habitats Regulations it is an offence to:

- Deliberately capture, injure or kill any wild animal of an EPS;
- Deliberately disturb wild animals of any such species*;

*In particular any disturbance which is likely to a) impair their ability to survive, breed, reproduce, rear or nurture their young, hibernate or migrate, or b) affect significantly the local distribution or abundance of the species to which they belong.

- Deliberately take or destroy the eggs of such an animal; and
- Damage or destroy a breeding site or resting place of such an animal.

It is also an offence to be in possession of or to control, transport, sell or exchange, or offer for sale or exchange, any live or dead animal or part of an animal of an EPS which has been taken from the wild, or anything derived from such an animal or any part of such an animal.

If the ecologist determines that impacts to an EPS are unavoidable then the works may need to be carried out under a site-specific mitigation licence from Natural England (NE). Activities that would otherwise constitute an offence under this legislation may be licensed by Natural England for certain purposes. Low Impact Class licences are also available for bats and great crested newts, enabling Registered Low Impact Consultants to undertake certain low impact activities reducing the EPS application paperwork and process length. District licencing is also available for great crested newts.

National Site Network

Certain EPS are also listed under Annex II of the Habitats Directive and are designated and afforded protection under the Habitats Regulations by the establishment of core areas of habitat known as Special Areas of Conservation. This means these species are a relevant consideration in a Habitats Regulations Assessment (HRA). The Birds Directive seeks to maintain populations of all wild bird species across their natural range (Article 2). All bird species listed under Annex I⁴ of the Birds Directive are rare or vulnerable and afforded protection by the classification of Special Protection Areas (SPAs), these are also designated under all regularly occurring migratory species, with regard to the protection of wetlands of international importance (Article 4). This means these bird species and communities are a relevant consideration in HRA.

The Habitats Regulations require projects or plans to be screened by the competent authority (usually the Local Planning Authority) for likely significant effects upon SPA, SAC and candidate SACs (cSACs). Guidance and policy also requires potential SPAs (pSPAs) and Ramsar sites be subject to the same assessment. If the competent authority is unable to conclude that significant effects are not likely, the Proposed Development must be subject to Appropriate Assessment in accordance with the Habitats Regulations.

⁴ To view birds listed under Annex I visit:

http://ec.europa.eu/environment/nature/conservation/wildbirds/threatened/index_en.htm

The Invasive Alien Species (Enforcement and Permitting) Order 2019

This removes the Invasive Alien Species (IAS) of European Union concern from the scope of Sections 14 and 14ZA of the WCA, and brings all offences relating to species of European Union concern into one place under The Invasive Alien Species (Enforcement and Permitting) Order 2019. For animal species under this order, it is an offence to release or allow them to escape into the wild, and for plant species it is an offence to plant or otherwise cause them to grow in the wild.

Schedule 9A of the WCA is amended to ensure that species control agreements can be used for all species of European Union concern, including widely-spread invasive species.

Environment Act 2021

The Environment Act 2021 legislates enhancing the environment through measures and targets for improving air quality and waste management, increase recycling, restoring habitats and preventing species decline. This includes a new legally binding target on increasing abundance of British species by 2030, makes a requirement for Local Nature Recovery Strategies, and updates the NERC Act 2006 (see below). The Act also sets out the requirement for the Secretary of State to prepare an Environmental Improvement Plan, and sets out a framework for mandatory Biodiversity Net Gain in England.

Section 98 of the Environment Act specifies that measures outlined in Schedule 14 of the Environment Act, to make provision for biodiversity gain to be a condition of planning permission in England, are to apply. Schedule 14 specifies that biodiversity gains are to be assessed using the metric published by the Secretary of State (SoS) and that a 10% gain will be mandatory. The Act requires that gains must be secured for a minimum of 30 years post completion of development. This is implemented through the insertion of Schedule 7A into the Town and Country Planning Act 1990, which provides the statutory framework. The Act includes this requirement for Nationally Significant Infrastructure Projects (NSIPs), being secured under Section 99 and Schedule 15 of the Planning Act 2008. It is expected that the mandatory requirement for a 10% gain for NSIPs will come into force in November 2025.

As a result, under the Town and Country Planning Act 1990, every grant of planning permission is deemed to have been granted subject to the pre-commencement condition that the biodiversity gain objective is met ('the biodiversity gain condition'). The biodiversity gain objective is for development to deliver at least a 10% increase in biodiversity value relative to the pre-development biodiversity value of the onsite habitat. Secondary legislation includes a number of biodiversity net gain regulations which provide the detail around implementing mandatory BNG, including provisions around irreplaceable habitats, and amendments which set out the requirements of the Biodiversity Gain Hierarchy.

Natural Environment and Rural Communities (NERC) Act 2006 (as amended)

The Natural Environment and Rural Communities Act (NERC Act) provides that any public body or statutory undertaker in England must have regard to the purpose of conservation of biological diversity in the exercise of their functions. The intention is to help ensure that biodiversity becomes an integral consideration in the development of policies and plans.

The Environment Act 2021 makes changes to the NERC Act which updates the general duty to conserve biodiversity by adding a duty to not only conserve but also enhance biodiversity. Public authorities are also expected to produce reports on the action they have taken under this duty when designated by the Secretary of State. Under Section 40 of this legislation, every public body (including planning authorities) must further the general biodiversity objective, which is described as ‘the conservation and enhancement of biodiversity in England through the exercise of functions in relation to England’.

Section 41 of the NERC Act requires the Secretary of State (SoS) to “publish a list of the living organisms and types of habitat which in the Secretary of State's opinion are of principal importance for the purpose of conserving biodiversity”. These are referred to as Habitats/Species of Principal Importance. The habitats and species listed in accordance with Section 41 largely replicate those listed on the UK Biodiversity Action Plan (BAP) which occur in England (however there are exceptions).

The National Parks and Access to the Countryside Act 1949

The Act provides the framework for the creation of National Parks, National Nature Reserves and Local Nature Reserves. The Act confers powers on the Nature Conservancy (a now defunct government body whose functions Natural England now perform) and local authorities: for the establishment and maintenance of nature reserves; to make further provision for the recording, creation, maintenance and improvement of public paths; for securing access to open country; and to amend the law relating to Public Rights of Way (PRoW).

The Protection of Badgers Act 1992

It is an offence to wilfully take, kill, injure, possess or ill-treat a badger. Under the Act their setts are protected against intentional or reckless interference. Sett interference includes damaging or destroying a sett, obstructing access to any part of the sett, or disturbance of a badger whilst it is occupying a sett. The Act defines a badger sett as ‘any structure or place, which displays signs indicating the current use by a badger’ and Natural England (NE) takes this definition to

include seasonally used setts that are not occupied but that show sign of recent use by badgers (Natural England, 2009⁵).

If impacts to badgers or their setts are unavoidable then authorised sett disturbance requires a licence. Activities that would otherwise constitute an offence under this legislation may be licensed by Natural England for certain purposes.

The Hedgerows Regulations 1997

The Hedgerows Regulations (1997) make provision for the protection of important hedgerows in England and Wales. The regulations affect hedgerows which are 20 m or more in length or connected at both ends to another hedgerow of any length. They relate to hedgerows which are on, or adjoining land used for agriculture and / or conservation purposes. They do not include hedges that are attached to or marking the boundaries of a private dwelling.

The National Planning Policy Framework (NPPF) 2026

The National Planning Policy Framework 2026 (the 'NPPF') sets out the Government's planning policies for England and it contains relevant policies specific to biodiversity and nature conservation (most notably in section 19). It sets out provisions for biodiversity, including protected sites and species, for which local planning authorities (LPAs) must have regard.

The NPPF requires local authorities in England to take measures to:

- Protect and enhance sites of biodiversity;
- Recognise the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services;
- Minimise impacts and provide net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- Prevent new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability; and
- Remediate and mitigate despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

When determining planning applications, local planning authorities should apply principles including:

- If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

⁵ Natural England, June 2009, Protection of Badgers Act 1992 (as amended), Guidance on 'Current Use' in the definition of a Badger Sett WMLG17, Natural England, Peterborough.

- Typically refusing development on land within or outside a Site of Special Scientific Interest that is likely to have an adverse effect on it (either individually or in combination with other developments). The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
- Typically refusing development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) unless there are wholly exceptional reasons (for example, infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), where the public benefit would clearly outweigh the loss or deterioration of habitat), and a suitable compensation strategy exists. Irreplaceable habitats are defined in the glossary as: “habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen”; and
- Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

Planning Practice Guidance (PPG) has been published alongside the NPPF, and is regularly updated, to provide guidance on the implementation of the planning policies. It is also a matter of government policy under the NPPF that Ramsar Sites are given the same protection as European Sites (habitats sites), and therefore should be considered in the HRA process.

The UK Post-2010 Biodiversity Framework (2011-2020) (JNCC and Defra, 2012)

The UK Post-2010 Biodiversity Framework covers the period from 2011 to 2020 and was developed in response to two main drivers: the Convention on Biological Diversity's Strategic Plan for Biodiversity 2011-2020, and its five strategic goals; and 20 'Aichi Targets'. The Framework lists the UK's most threatened species and habitats and sets out targets and objectives for their management and recovery. The targets set in this framework are still valid, even though the period has now elapsed. The Biodiversity Framework shows how the work of the four UK countries joins up with work at a UK level to achieve the 'Aichi Targets' and the aims of the EU Biodiversity Strategy. It identifies the activities required to complement each country's biodiversity strategy, and where work in the country strategy contributes to international obligations.

Cheshire West and Chester Local Plan (Part One) Strategic Policies (adopted 2015)

The Cheshire West and Chester Local Plan was adopted on the 29th January 2015 and forms part of the statutory development plan for the borough. The purpose of this Plan is to provide the overall vision, strategic objectives, spatial strategy and strategic planning policies for the borough to 2030. The Local Plan (Part One) will be the starting point when considering planning applications and will be supported by the Cheshire West and Chester Local Plan (Part Two) Land Allocations and Detailed Policies Plan in due course.

The principle of sustainable development is at the heart of planning policy. The need to protect and enhance our natural, historic and built environments is central to sustainable development. The planning system plays an essential role in ensuring the prudent use of our natural resources and minimisation of waste arisings and pollution. Alongside this the planning system supports the mitigation and adaptation to the effects of climate change whilst seeking the development of renewable and low carbon energy. The Local Plan must also seek to protect our natural and historic environments by seeking the highest quality design and sustainable construction. The Local Plan seeks to meet these requirements through the following policies.

- 'ENV 1 Flood risk and water management'
- 'ENV 2 Landscape'
- 'ENV 3 Green infrastructure'
- 'ENV 4 Biodiversity and geodiversity'
- 'ENV 5 Historic environment'
- 'ENV 6 High quality design and sustainable construction'
- 'ENV 7 Alternative energy supplies'
- 'ENV 8 Managing waste'
- 'ENV 9 Minerals supply and safeguarding'

Appendix C – Target Notes



TN1 – Active demolition site



TN2 – Pipe through woodland



TN3 – Ditch present on OS mapping but not present upon survey

No picture available. Target Note included as a spatial guide.

TN4 – Peregrine soaring near large chimney



No picture available. Target Note included as a spatial guide.

TN6 Rabbit warren

TN7 – Kestrel hunting over scrub

Appendix D – Photographs



Photograph 1 – Grassland in the north-west of Site



Photograph 2 – Potential Open mosaic area in the eastern extent of the Site, west of Pool Lane



Photograph 3 – Grassland in the eastern extent of the Site, west of Pool Lane



Photograph 4 – Grassland south of Oil Sites Road



Photograph 5 – Grassland to the south of Oil Sites and south of large woodland parcel



Photograph 6 – Grassland to the north-western edge of the Site



Photograph 7 – Grassland to the east of the Site, west of Pool Lane



Photograph 8 – Grassland to the east of the Site, west of Pool Lane



Photograph 9 – Large woodland to the south of Oil Sites Road



Photograph 10 – Small woodland to the north-east of the Site



Photograph 11 – Woodland to the north-eastern extent of the Site, off Pool Lane



Photograph 12 – Woodland to the north-east of the Site, off Pool Lane



Photograph 13 – Small woodland parcel to the west of Pool Lane



Photograph 14 – Woodland to the east of Pool Lane



Photograph 15 – Woodland to the west of Pool Lane



Photograph 16 – Woodland to the eastern central of Pool Lane



Photograph 17 – Woodland to the west of the Site



Photograph 18 – Woodland alongside A5117



Photograph 19 – Woodland to the far south-eastern extent of the Site



Photograph 20 - Woodland to the south-eastern extent of the Site



Photograph 21 – Woodland to the southern edge of the Site



Photograph 22 - Large woodland to the northern centrality of the Site



Photograph 23 – Hedgerow on the western edge of Pool Lane



Photograph 24 – Hedgerow on the north-eastern edge of Pool Lane



Photograph 25 – Hedgerow on the south-eastern edge of Pool Lane



Photograph 26 – Scrub to the north-west of the Site



Photograph 27 – Scrub to the north of Oil Sites Road



Photograph 28 – Scrub to the south of Oil Sites Road



Photograph 29 – Two small urban trees



Photograph 30 - Ornamental scrub



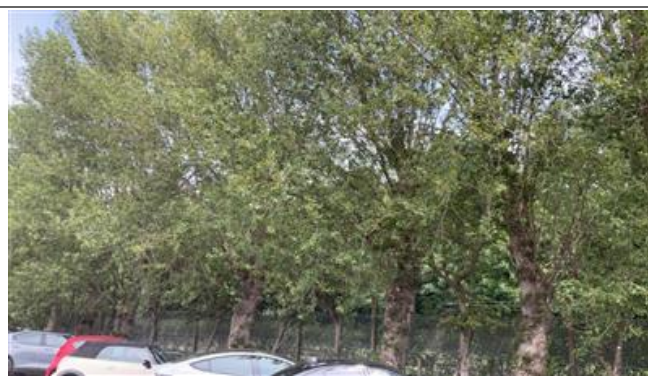
Photograph 31 - Trees to the north-west of the Site



Photograph 32 - Trees to the north of the Site



Photograph 33 – Goat willow near Boiler House



Photograph 34 – Black poplars to the east of Pool Lane



Photograph 35 – Sycamore trees to the west of Pool Lane



Photograph 36 – Fourteen lime trees to the south-eastern extent of the Site



Photograph 37 - Abandoned brick building, south of large woodland parcel



Photograph 38 – Metal corrugated building



Photograph 39 – Brick building with corrugated roof



Photograph 40 – Large warehouse



Photograph 41 – Metal clad building



Photograph 42 – 2nd Metal clad building



Photograph 43 – Brick and metal sheet cladding building



Photograph 44 – Metal warehouse



Photograph 45 – Brick and metal warehouse



Photograph 46 – Boiler House



Photograph 47 – Demineralisation plant



Photograph 48 – Brick-built building



Photograph 49 - Refinery-infrastructure building



Photograph 50 – Brick-built building



Photograph 51 – Unsealed ground to the north of Oil Sites Road



Photograph 52 – Unsealed surface to the south of the Site



Photograph 53 – Unsealed surface to the south of the Site



Photograph 54 – Vacant, derelict land, south of Oil Sites Road



Photograph 55 – Sparsely vegetated land



Photograph 56 – Mature vegetation growing through hardstanding



Photograph 57 – Built-up environment with ornamental planting



Photograph 58 – Hardstanding and refinery infrastructure example



**Photograph 59 – Concrete-banked
draining ditch**



**Photograph 60 – Slow flowing stream south
of the Site**

Appendix E – Plant Species List

Common Name	Scientific Name	Abundance Ranking (DAFOR)
g4 Modified Grassland - 106		
Perennial Rye-grass	<i>Lolium perenne</i>	D
Red Fescue	<i>Festuca rubra</i>	O
Yorkshire Fog	<i>Holcus lanatus</i>	O
Creeping Buttercup	<i>Ranunculus repens</i>	R
Sycamore	<i>Acer pseudoplatanus</i>	R
g4 Modified Grassland – 10, 106, 32		
Perennial Rye-grass	<i>Lolium perenne</i>	D
Daisy	<i>Bellis perennis</i>	O
Creeping Buttercup	<i>Ranunculus repens</i>	R
Ribwort Plantain	<i>Plantago lanceolata</i>	R
Creeping Thistle	<i>Cirsium arvense</i>	R
White Clover	<i>Trifolium repens</i>	O
Yorkshire Fog	<i>Holcus lanatus</i>	R
Rowan	<i>Sorbus aucuparia</i>	R
g4 Modified Grassland – 10, 106		
Yorkshire Fog	<i>Holcus lanatus</i>	F
Red Fescue	<i>Festuca rubra</i>	A
Perennial Rye-grass	<i>Lolium perenne</i>	O
Daisy	<i>Bellis perennis</i>	R
Common Bird's-foot Trefoil	<i>Lotus corniculatus</i>	R
Bearberry Cotoneaster	<i>Cotoneaster dammeri</i>	O
Dogwood	<i>Cornus sanguinea</i>	R

Common Name	Scientific Name	Abundance Ranking (DAFOR)
Portugal Laurel	<i>Prunus lusitanica</i>	R
Holly	<i>Ilex aquifolium</i>	R
Bramble	<i>Rubus fruticosus</i> agg.	R
g3c Other Neutral Grassland – 106		
Red Fescue	<i>Festuca rubra</i>	A
Creeping Cinquefoil	<i>Potentilla reptans</i>	A
Common Bird's Foot Trefoil	<i>Lotus corniculatus</i>	R
Daisy	<i>Bellis perennis</i>	R
Field Forget-me0not	<i>Myosotis arvensis</i>	R
Yarrow	<i>Achillea millefolium</i>	R
Cut Leaved Crane's-bill	<i>Geranium dissectum</i>	R
Mossy Stonecrop	<i>Crassula tillaea</i>	A
Common Mouse-ear	<i>Cerastium fontanum</i>	R
Common Ragwort	<i>Jacobaea vulgaris</i>	R
Common Field-speedwell	<i>Veronica persica</i>	R
g3c Other Neutral Grassland		
Common Vetch	<i>Vicia sativa</i>	F
Red Fescue	<i>Festuca rubra</i>	A
Cock's-foot	<i>Dactylis glomerata</i>	R
Creeping Thistle	<i>Cirsium arvense</i>	O
Curled Dock	<i>Rumex crispus</i>	O
Common Chickweed	<i>Stellaria media</i>	R
Creeping Cinquefoil	<i>Potentilla reptans</i>	R
g3 Neutral Grassland - 10		
Cock's-foot	<i>Dactylis glomerata</i>	O
Common Bird's-foot Trefoil	<i>Lotus corniculatus</i>	R

Common Name	Scientific Name	Abundance Ranking (DAFOR)
Silver Birch	<i>Betula pendula</i>	O
Goat Willow	<i>Salix caprea</i>	R
Ribwort Plantain	<i>Plantago lanceolata</i>	R
g4 Modified Grassland – 106		
Perennial Rye-grass	<i>Lolium perenne</i>	D
Meadow Buttercup	<i>Ranunculus acris</i>	O
Daisy	<i>Bellis perennis</i>	O
Ribwort Plantain	<i>Plantago lanceolata</i>	R
White Clover	<i>Trifolium repens</i>	O
g4 Modified Grassland – 10, 106		
Perennial Rye-grass	<i>Lolium perenne</i>	D
Cock's-foot	<i>Dactylis glomerata</i>	O
Creeping Buttercup	<i>Ranunculus repens</i>	R
Field Horsetail	<i>Equisetum arvense</i>	R
Dandelion	<i>Taraxacum officinale agg.</i>	R
Ribwort Plantain	<i>Plantago lanceolata</i>	R
Common Bird's-foot Trefoil	<i>Lotus corniculatus</i>	R
Buckthorn	<i>Rhamnus cathartica</i>	R
g4 Modified Grassland – 10, 106, 526		
Perennial Rye-grass	<i>Lolium perenne</i>	D
Yorkshire Fog	<i>Holcus lanatus</i>	O
Daisy	<i>Bellis perennis</i>	O
Creeping Buttercup	<i>Ranunculus repens</i>	O
Creeping Thistle	<i>Cirsium arvense</i>	O
Common Ragwort	<i>Jacobaea vulgaris</i>	R
Red Clover	<i>Trifolium pratense</i>	R

Common Name	Scientific Name	Abundance Ranking (DAFOR)
Dandelion	<i>Taraxacum officinale</i> agg.	R
Hawthorn	<i>Crataegus monogyna</i>	R
Cotoneaster sp.	<i>Cotoneaster</i> sp.	R
Goat Willow	<i>Salix caprea</i>	R
Bramble	<i>Rubus fruticosus</i> agg.	R
Field Horsetail	<i>Equisetum arvense</i>	R
Bracken	<i>Pteridium aquilinum</i>	R
w1g Other Broadleaved Woodland – 30, 518, 532, 502		
Ash	<i>Fraxinus excelsior</i>	A
Sycamore	<i>Acer pseudoplatanus</i>	F
Black Poplar	<i>Populus nigra</i>	R
Hawthorn	<i>Crataegus monogyna</i>	O
Pedunculate Oak	<i>Quercus robur</i>	R
Goat Will	<i>Salix caprea</i>	O
Elm	<i>Ulmus</i> sp.	R
Common Nettle	<i>Urtica dioica</i>	A
Cleavers	<i>Galium aparine</i>	F
Bracken	<i>Pteridium aquilinum</i>	R
Bramble	<i>Rubus fruticosus</i> agg.	R
Rosebay Willowherb	<i>Chamerion angustifolium</i>	O
Meadow Buttercup	<i>Ranunculus acris</i>	R
Himalayan Balsam	<i>Impatiens glandulifera</i>	A
Common Chickweed	<i>Stellaria media</i>	R
Cock's-foot	<i>Dactylis glomerata</i>	O
Hogweed	<i>Heracleum sphondylium</i>	R
Yorkshire Fog	<i>Holcus lanatus</i>	O

Common Name	Scientific Name	Abundance Ranking (DAFOR)
Common Ragwort	<i>Jacobaea vulgaris</i>	R
Herb Robert	<i>Geranium robertianum</i>	R
Creeping Thistle	<i>Cirsium arvense</i>	R
Ribwort Plantain	<i>Plantago lanceolata</i>	R
Common Reed	<i>Phragmites australis</i>	R
w1g Other Broadleaved Woodland – 30, 517		
Ash	<i>Fraxinus excelsior</i>	A
Hawthorn	<i>Crataegus monogyna</i>	O
Pedunculate Oak	<i>Quercus robur</i>	O
Sycamore	<i>Acer pseudoplatanus</i>	A
Large-leaved Lime	<i>Tilia platyphyllos</i>	R
Silver Birch	<i>Betula pendula</i>	O
Wild Cherry	<i>Prunus avium</i>	R
Horse-chestnut	<i>Aesculus hippocastanum</i>	R
Common Nettle	<i>Urtica dioica</i>	A
Garlic Mustard	<i>Alliaria petiolata</i>	O
Cleavers	<i>Galium aparine</i>	O
Bramble	<i>Rubus fruticosus agg.</i>	R
Hogweed	<i>Heracleum sphondylium</i>	R
Cow Parsley	<i>Anthriscus sylvestris</i>	R
Beech	<i>Fagus sylvatica</i>	R
Elder	<i>Sambucus nigra</i>	R
Red Campion	<i>Silene dioica</i>	R
Cock's-foot	<i>Dactylis glomerata</i>	O
Yorkshire Fog	<i>Holcus lanatus</i>	R
Perennial Rye-grass	<i>Lolium perenne</i>	R

Common Name	Scientific Name	Abundance Ranking (DAFOR)
Hazel	<i>Corylus avellana</i>	R
Rowan	<i>Sorbus aucuparia</i>	R
Dogwood	<i>Cornus sanguinea</i>	R
w1g Other Broadleaved Woodand – 30. 510, 521		
Goat Willow	<i>Salix caprea</i>	A
Silver Birch	<i>Betula pendula</i>	F
Buddleia	<i>Buddleja davidii</i>	O
Rosebay Willowherb	<i>Chamerion angustifolium</i>	O
Hard Rush	<i>Juncus inflexus</i>	R
Creeping Thistle	<i>Cirsium arvense</i>	R
Bramble	<i>Rubus fruticosus agg.</i>	R
Creeping Buttercup	<i>Ranunculus repens</i>	R
Pedunculate Oak	<i>Quercus robur</i>	R
Common Reed	<i>Phragmites australis</i>	R
w1g Other Broadleaved Woodand – 30, 202, 510		
Goat Willow	<i>Salix caprea</i>	A
Silver Birch	<i>Betula pendula</i>	A
Buddleia	<i>Buddleja davidii</i>	O
Sea Buckthorn	<i>Hippophae rhamnoides</i>	O
Bramble	<i>Rubus fruticosus agg.</i>	O
Common Birds-foot Trefoil	<i>Lotus corniculatus</i>	O
Crane's-bill	<i>Geranium sp.</i>	R
Round-leaved Dog Rose	<i>Rosa tomentosa</i>	R
Cock's-foot	<i>Dactylis glomerata</i>	O
Creeping Thistle	<i>Cirsium arvense</i>	R
Rosebay Willowherb	<i>Chamerion angustifolium</i>	R

Common Name	Scientific Name	Abundance Ranking (DAFOR)
w1g Other Broadleaved Woodand – 30, 217, 511, 518		
Silver Birch	<i>Betula pendula</i>	A
Pedunculate Oak	<i>Quercus robur</i>	O
Goat Willow	<i>Salix caprea</i>	F
Buddleia	<i>Buddleja davidii</i>	O
Fir sp.	<i>Abies</i> sp.	R
Rosebay Willowherb	<i>Chamerion angustifolium</i>	R
Herb Robert	<i>Geranium robertianum</i>	R
Creeping Thistle	<i>Cirsium arvense</i>	R
Common Nettle	<i>Urtica dioica</i>	R
Bramble	<i>Rubus fruticosus</i> agg.	R
Cock's-foot	<i>Dactylis glomerata</i>	R
St John's Wort	<i>Hypericum</i> sp.	R
Yorkshire Fog	<i>Holcus lanatus</i>	R
False Oat-grass	<i>Arrhenatherum elatius</i>	R
w1g Other Broadleaved Woodand		
Sycamore	<i>Acer pseudoplatanus</i>	A
Hawthorn	<i>Crataegus monogyna</i>	O
Wild Cherry	<i>Prunus avium</i>	O
Ash	<i>Fraxinus excelsior</i>	R
Pedunculate Oak	<i>Quercus robur</i>	R
Bramble	<i>Rubus fruticosus</i> agg.	O
w1g Other Broadleaved Woodand		
Whitebeam	<i>Sorbus aria</i>	A
Pedunculate Oak	<i>Quercus robur</i>	R
Hawthorn	<i>Crataegus monogyna</i>	A

Common Name	Scientific Name	Abundance Ranking (DAFOR)
Round-leaved Dog Rose	<i>Rosa obtusifolia</i>	R
Bramble	<i>Rubus fruticosus</i> agg.	F
Cleavers	<i>Galium aparine</i>	O
Cock's-foot	<i>Dactylis glomerata</i>	O
Elder	<i>Sambucus nigra</i>	R
w1g Other Broadleaved Woodland – 29, 516		
Horse-chestnut	<i>Aesculus hippocastanum</i>	A
Large-leaved Lime	<i>Tilia platyphyllos</i>	O
Pedunculate Oak	<i>Quercus robur</i>	R
Sycamore	<i>Acer pseudoplatanus</i>	A
Silver Birch	<i>Betula pendula</i>	O
Hawthorn	<i>Crataegus monogyna</i>	R
Ivy	<i>Hedera helix</i>	O
Bramble	<i>Rubus fruticosus</i> agg.	R
Garlic Mustard	<i>Alliaria petiolata</i>	R
Cow Parsley	<i>Anthriscus sylvestris</i>	R
Cleavers	<i>Galium aparine</i>	R
Broad-leaved Dock	<i>Rumex obtusifolius</i>	R
Holly	<i>Ilex aquifolium</i>	R
Hogweed	<i>Heracleum sphondylium</i>	R
Wild Cherry	<i>Prunus avium</i>	R
Herb Bennet	<i>Geum urbanum</i>	R
Cock's-foot	<i>Dactylis glomerata</i>	O
Rough Meadow Grass	<i>Poa trivialis</i>	R
Beech	<i>Fagus sylvatica</i>	R
w1g Other Broadleaved Woodland – 29, 30		

Common Name	Scientific Name	Abundance Ranking (DAFOR)
Ash	<i>Fraxinus excelsior</i>	D
Black Poplar	<i>Populus nigra</i>	O
Wild Cherry	<i>Prunus avium</i>	O
w1g Other Broadleaved Woodland – 29, 30		
Sycamore	<i>Acer pseudoplatanus</i>	D
Small-leaved Lime	<i>Tilia cordata</i>	F
White Birch	<i>Betula albo-sinensis</i>	O
Horse-chestnut	<i>Aesculus hippocastanum</i>	F
Gorse	<i>Ulex europaeus</i>	R
Ivy	<i>Hedera helix</i>	D
Bramble	<i>Rubus fruticosus agg.</i>	A
Hawthorn	<i>Crataegus monogyna</i>	O
White Oak	<i>Quercus alba</i>	R
American Arbour-vitae	<i>Thuja occidentalis</i>	R
Cleavers	<i>Galium aparine</i>	O
Herb Bennet	<i>Geum urbanum</i>	O
w1g Other Broadleaved Woodland – 30		
Ash	<i>Fraxinus excelsior</i>	D
Sycamore	<i>Acer pseudoplatanus</i>	O
Pedunculate Oak	<i>Quercus robur</i>	O
Beech	<i>Fagus sylvatica</i>	R
Wild Cherry	<i>Prunus avium</i>	R
w1g Other Broadleaved Woodland		
Sycamore	<i>Acer pseudoplatanus</i>	F
Silver Birch	<i>Betula pendula</i>	F
Wild Cherry	<i>Prunus avium</i>	R

Common Name	Scientific Name	Abundance Ranking (DAFOR)
Darwin's Barberry	<i>Berberis darwinii</i>	R
Ash	<i>Fraxinus excelsior</i>	R
Hedge Bindweed	<i>Calystegia sepium</i>	R
Spanish bluebell	<i>Hyacinthoides hispanica</i>	A
Male fern	<i>Dryopteris filix-mas</i>	O
Common Nettle	<i>Urtica dioica</i>	R
Garlic Mustard	<i>Alliaria petiolata</i>	R
Elder	<i>Sambucus nigra</i>	R
w1g Other Broadleaved Woodland – 29		
Hazel	<i>Corylus avellana</i>	D
Gelder-rose	<i>Viburnum opulus</i>	O
Cotoneaster sp.	<i>Cotoneaster sp.</i>	R
Ash	<i>Fraxinus excelsior</i>	R
Common Chickweed	<i>Stellaria media</i>	R
Common Ragwort	<i>Jacobaea vulgaris</i>	R
w1g Other Broadleaved Woodland – 29, 30		
Hawthorn	<i>Crataegus monogyna</i>	A
Pedunculate Oak	<i>Quercus robur</i>	F
White Poplar	<i>Populus alba</i>	O
Sycamore	<i>Acer pseudoplatanus</i>	R
Ivy	<i>Hedera helix</i>	R
Bramble	<i>Rubus fruticosus agg.</i>	O
Common Nettle	<i>Urtica dioica</i>	O
Cleavers	<i>Galium aparine</i>	O
Ash	<i>Fraxinus excelsior</i>	R
Dog-rose	<i>Rosa sp.</i>	R

Common Name	Scientific Name	Abundance Ranking (DAFOR)
Cock's foot	<i>Dactylis glomerata</i>	O
Hogweed	<i>Heracleum sphondylium</i>	R
Cow Parsley	<i>Anthriscus sylvestris</i>	R
Common Knapweed	<i>Centaurea nigra</i>	R
False Oat-grass	<i>Arrhenatherum elatius</i>	R
Field Horsetail	<i>Equisetum arvense</i>	R
Curled Dock	<i>Rumex crispus</i>	O
Creeping Thistle	<i>Cirsium arvense</i>	R
Yarrow	<i>Achillea millefolium</i>	R
Beech	<i>Fagus sylvatica</i>	R
w1 – 33 Line of Trees, 521		
Silver Birch	<i>Betula pendula</i>	A
Buddleia	<i>Buddleja davidii</i>	F
Goat Willow	<i>Salix caprea</i>	O
Ribwort Plantain	<i>Plantago lanceolata</i>	R
Rosebay Willowherb	<i>Chamerion angustifolium</i>	O
Creeping Thistle	<i>Cirsium arvense</i>	R
Common Bird's-foot Trefoil	<i>Lotus corniculatus</i>	R
Herb Robert	<i>Geranium robertianum</i>	R
Crane's Bill	<i>Geranium</i> sp.	R
h3h Mixed Scrub		
Hawthorn	<i>Crataegus monogyna</i>	F
Silver Birch	<i>Betula pendula</i>	O
Goat Willow	<i>Salix caprea</i>	F
Bramble	<i>Rubus fruticosus</i> agg.	F
Crack Willow	<i>Salix fragilis</i>	O

Common Name	Scientific Name	Abundance Ranking (DAFOR)
Pedunculate Oak	<i>Quercus robur</i>	R
Bracken	<i>Pteridium aquilinum</i>	R
Yorkshire Fog	<i>Holcus lanatus</i>	O
Creeping Thistle	<i>Cirsium arvense</i>	R
Herb Robert	<i>Geranium robertianum</i>	R
Rosebay Willowherb	<i>Chamerion angustifolium</i>	R
Broad-leaved Dock	<i>Rumex obtusifolius</i>	R
Yarrow	<i>Achillea millefolium</i>	R
Ribwort Plantain	<i>Plantago lanceolata</i>	R
h3h Mixed Scrub		
Goat Willow	<i>Salix caprea</i>	F
Buddleia	<i>Buddleja davidii</i>	F
Silver Birch	<i>Betula pendula</i>	O
Common Reed	<i>Phragmites australis</i>	R
Hawthorn	<i>Crataegus monogyna</i>	R
Soft Rush	<i>Juncus effusus</i>	R
Bramble	<i>Rubus fruticosus agg.</i>	F
Sycamore	<i>Acer pseudoplatanus</i>	R
Gorse	<i>Ulex europaeus</i>	R
h3d Bramble Scrub		
Bramble	<i>Rubus fruticosus agg.</i>	D
Common Nettle	<i>Urtica dioica</i>	F
Cock's-foot	<i>Dactylis glomerata</i>	F
h3h Mixed Scrub - 516		
Gorse	<i>Ulex europaeus</i>	O
Silver Birch	<i>Betula pendula</i>	O

Common Name	Scientific Name	Abundance Ranking (DAFOR)
Cotoneaster sp.	<i>Cotoneaster</i> sp.	F
Holly	<i>Ilex aquifolium</i>	R
Box	<i>Buxus sempervirens</i>	F
Sycamore	<i>Acer pseudoplatanus</i>	R
Ash	<i>Fraxinus excelsior</i>	R
h3j Willow Scrub – 32, 504, 518		
Grey Willow	<i>Salix cinerea</i>	D
Wild Cherry	<i>Prunus avium</i>	O
Pedunculate Oak	<i>Quercus robur</i>	O
Buddleia	<i>Buddleja davidii</i>	F
Bramble	<i>Rubus fruticosus</i> agg.	F
Rosebay Willowherb	<i>Chamerion angustifolium</i>	O
Hawthorn	<i>Crataegus monogyna</i>	R
White Birch	<i>Betula albo-sinensis</i>	O
h2a6 Other Native Hedgerow – 11		
Bramble	<i>Rubus fruticosus</i> agg.	D
Sycamore	<i>Acer pseudoplatanus</i>	A
Rosebay Willowherb	<i>Chamerion angustifolium</i>	R
Cleavers	<i>Galium aparine</i>	R
Pedunculate Oak	<i>Quercus robur</i>	O
Common Nettle	<i>Urtica dioica</i>	R
h2a6 Other Native Hedgerow – 11, 116, 516		
Hawthorn	<i>Crataegus monogyna</i>	D
Sycamore	<i>Acer pseudoplatanus</i>	R
Ash	<i>Fraxinus excelsior</i>	R
Blackthorn	<i>Prunus spinosa</i>	O

Common Name	Scientific Name	Abundance Ranking (DAFOR)
h2a6 Other Native Hedgerow – 116, 516		
Hawthorn	<i>Crataegus monogyna</i>	D
h2a6 Other Native Hedgerow		
Hawthorn	<i>Crataegus monogyna</i>	D
u1f Sparsely Vegetated Urban Land – 82, 518		
Buddleia	<i>Buddleja davidii</i>	F
Silver Birch	<i>Betula pendula</i>	F
Goat Willow	<i>Salix caprea</i>	O
Rosebay Willowherb	<i>Chamerion angustifolium</i>	R
Common Bird's-foot Trefoil	<i>Lotus corniculatus</i>	R
Gorse	<i>Ulex europaeus</i>	R
u1f Sparsely Vegetated Urban Land – 81		
Buddleia	<i>Buddleja davidii</i>	A
Goat Willow	<i>Salix caprea</i>	A
Silver Birch	<i>Betula pendula</i>	A
u1f Sparsely Vegetated Urban Land – 81		
Buddleia	<i>Buddleja davidii</i>	D
Goat Willow	<i>Salix caprea</i>	A
Silver Birch	<i>Betula pendula</i>	R
u1f Sparsely Vegetated Urban Land – 81		
Goat Willow	<i>Salix caprea</i>	O
Silver Birch	<i>Betula pendula</i>	O
Bramble	<i>Rubus fruticosus agg.</i>	O
Bracken	<i>Pteridium aquilinum</i>	R
Rosebay Willowherb	<i>Chamerion angustifolium</i>	R
Cock's foot	<i>Dactylis glomerata</i>	R

Common Name	Scientific Name	Abundance Ranking (DAFOR)
Creeping Thistle	<i>Cirsium arvense</i>	R
Common Bird's-foot Trefoil	<i>Lotus corniculatus</i>	R
u1f Sparsely Vegetated Urban Land – 81		
Silver Birch	<i>Betula pendula</i>	R
Goat Willow	<i>Salix caprea</i>	R
Sharp Rush	<i>Juncus acutus</i>	O
Common Bird's-foot Trefoil	<i>Lotus corniculatus</i>	O
Bristly Oxtongue	<i>Helminthotheca echioides</i>	R
Bramble	<i>Rubus fruticosus</i> agg.	O
u1f Sparsely Vegetated Urban Land – 847		
Cherry Laurel	<i>Prunus laurocerasus</i>	A
Red-osier Dogwood	<i>Cornus sericea</i>	F
Cotoneaster sp.	<i>Cotoneaster</i> sp.	R
Norway Maple	<i>Acer platanoides</i>	R
u1c Artificial Unvegetated and Unsealed Surface		
Buddleia	<i>Buddleja davidii</i>	F
Silver Birch	<i>Betula pendula</i>	O



PUBLIC

EET Fuels

Stanlow Hydrogen Ready Combined Heat and Power Project Development Consent Order

Volume 3, Appendix 8.1: Heritage Statement

02-09-2026

Document ref: 2026UK550445-ENV-001



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Appendix A – Historic Environmental Gazetteer

Appendix B – Figures

Executive summary

Essar Energy Transition Fuels (EET Fuels) (hereafter referred to as 'the Applicant') is committed to creating the United Kingdom's (UK's) first low carbon refinery, investing £1.2bn over the next five years to lower emissions by decarbonising production processes. The Applicant is proposing to construct and operate a Hydrogen Ready Combined Heat and Power Facility at the Stanlow Manufacturing Complex (SMC) (hereafter referred to as 'the Proposed Development'). WSP has been commissioned by the Applicant to produce a Heritage Statement for the Proposed Development.

The Site sits mostly within the existing SMC and does not contain any designated heritage assets. The Thornton-le-Moors Conservation Area is located approximately 20 metres (m) to the south of the Red Line Boundary. This Conservation Area contains the Grade I listed Church of St Mary (**National Heritage List for England (NHLE: 1330242)**), as well as other Grade II Listed Buildings in the vicinity of the Site. The Ince Conservation Area is located 10m to the north of the Red Line Boundary, and contains the scheduled Ince Monastic Grange, the Grade I listed Manor House of Abbey of St Werburgh Chester, including Old Hall and Monastery Cottages (**NHLE: 1138810**) and the Grade II* listed Church of St James (**NHLE 1138815**). The Elton Conservation Area is located approximately 700m to the east of the Red Line Boundary and contains the Grade II* listed Rock Farmhouse (**NHLE: 1138369**).

This Heritage Statement provides an understanding of the heritage significance of designated heritage assets within the vicinity of the Site and considers how their setting contributes to that significance. It then assesses the likely impact of the Proposed Development on that significance. Assets in the wider vicinity have been scoped out of the settings assessment as the Site is not considered to form part of the setting of those assets. The Grade II listed Building 50 at Thornton Aero Engine Research Laboratory (**NHLE: 1392326**) is located within the SMC and the Proposed Development is not considered to result in a change to the setting of this asset.

Thornton-le-Moors Conservation Area

If the new elements within the Site are visible from the wider environment, they will be evident as part of the industrial landscape to the north of the Thornton-le-Moors Conservation Area. Should these structures be visible from the designation, this will not constitute adverse harm to the significance and setting of the heritage asset, given that the Conservation Area was designated sixty years after the early part of the SMC was developed (of which the Site forms a part). With this in mind, it is likely that the Proposed Development will at most result in a **Minimal Neutral** impact to the setting of the Conservation Area.

Grade I Listed Church of St Mary (NHLE: 1330242)

If the new elements within the Site are visible, these will be evident in the context of the industrial landscape to the north of the heritage asset. Should the new structures be visible in the context of the heritage asset, this will not constitute adverse harm to its significance and setting. With this in mind, the Proposed Development will at most result in a **Minimal Neutral** impact to the setting of the heritage asset.

Grade II Listed Retaining Wall bounding Churchyard of St Mary's Church on west, south and half on east side including gate piers at southwest corner (NHLE: 1130655)

Should the new structures be visible in the context of the heritage asset, this will not constitute adverse harm to its significance and setting. With this in mind, the Proposed Development will at most result in a **Minimal Neutral** impact to the setting of the heritage asset.

Grade II Listed Table Tomb to John Davies of Dunham, southeast of Church of St Mary (NHLE: 1145887)

The table tomb is located on the southeast side of the Church of St Mary, and due to intervening buildings and vegetation, there is no intervisibility between the heritage asset and the Site. With this in mind, the development within the Site will result in a **Negligible Neutral** impact on the setting of the asset.

Grade II Listed Church Farmhouse including Cottage Wing to West (NHLE: 1330241)

Should the new structures be visible in the context of the heritage asset, this will not constitute adverse harm to its significance and setting. With this in mind, the Proposed Development will at most result in a **Minimal Neutral** impact on the setting of the heritage asset.

Ince Conservation Area

New infrastructure elements added within the Site will largely be screened from views within the Conservation Area by woodland and trees on the edge of the designation. Those that may be visible would be located in the south part of the SMC approximately 1km from the Conservation Area. The Proposed Development will at most result in a **Minimal Neutral** impact on the setting of the heritage asset.

Manor House of Abbey of St Werburgh Chester, Including Old Hall and Monastery Cottages (NHLE: 1138810)

New infrastructure elements added within the Site will be screened from views from the asset by intervening buildings, and trees on the edge of the conservation area. The SMC is also not considered to form part of the setting of this asset. As such, the Proposed Development will at most result in a **Negligible Neutral** impact on the setting of the heritage asset.

Church of St James (NHLE: 1138815)

New infrastructure elements added within the SMC would be screened from views from the asset by woodland to the south and trees along the edge of the Churchyard. The SMC is also not considered to form part of the setting of this asset. The Proposed Development will at most result in a **Negligible Neutral** impact on the setting of the heritage asset.

Elton Conservation Area

There may be some views of new infrastructure elements constructed within the Site, but these would for the most part be restricted from with the Conservation Area and partly screened by intervening buildings. The SMC is also not considered to form part of the setting of the Conservation Area and would not intrude upon this setting. The Proposed Development will at most result in a **Negligible Neutral** impact on the setting of the heritage asset.

Rock Farmhouse (NHLE: 1138369)

New infrastructure elements added within the Site would be screened from views from the asset by intervening buildings within Elton. The SMC is also not considered to form part of the setting of this asset. The Proposed Development will at most result in a **Negligible Neutral** impact on the setting of the heritage asset.

1. Introduction

1.1 Project Background

- 1.1.1 Essar Energy Transition Fuels (EET Fuels) (hereafter referred to as ‘the Applicant’) is committed to creating the UK’s first low carbon refinery, investing £1.2bn over the next five years to lower emissions by decarbonising production processes.
- 1.1.2 Dedicated to the Northwest of England, EET Fuels owns and operates the Stanlow Manufacturing Complex (SMC), located in Ellesmere Port on the south side of the Mersey Estuary near Liverpool. The SMC covers an area of approximately 600 hectares (ha). The SMC plays a key part in the national economy, predominantly a refinery with supporting services, the SMC produces over 18% of the UK’s transport fuels and 12% of its jet fuel. Annually, this equated to over 4.4 billion litres of diesel, three billion litres of petrol, and two billion litres of jet fuel, and feedstocks for the chemical and pharmaceutical supply chains.
- 1.1.3 The Applicant is proposing to construct and operate a Hydrogen Ready Combined Heat and Power (CHP) Facility at the SMC. The Project is crucial for the decarbonisation of the SMC, enabling the Applicant to decarbonise its existing fuel use by replacing its existing fossil-fuelled steam and electricity production facilities with those capable of burning 100% Hydrogen. The Project aligns with the UK Government’s ten-point plan to help the UK achieve its net zero emission targets by 2050.
- 1.1.4 A Town and Country Planning Act application is ongoing for CHP Phase 1. This Heritage Statement relates to CHP Phase 2, which is a Development Consent Order application. The Proposed Development for CHP Phase 2 will consist of the construction and operation of five hydrogen ready gas turbine modules (producing up to a constant output of 100 megawatts (MW) in total), and heat recovery steam generators (HRSG). The Proposed Development also includes the construction of a permanent access road to facilitate Abnormal Indivisible Loads (AILs) during construction, as well as additional pipes on existing gantries (to reach tie-ins across the SMC).
- 1.1.5 The land upon which the Proposed Development is to be located is referred to as the ‘Site’. The extent of the Proposed Development (hereafter referred to as the ‘Site Boundary’) is currently considered the maximum extent of all potential permanent and temporary works required in the construction and operation of the Proposed Development. The majority of the Site is located within the boundary of

the existing SMC. This Heritage Statement (HS) is based on the Site Boundary shown **on figures in Appendix B: Figures**.

- 1.1.6 In accordance with Paragraph 207 of the National Planning Policy Framework and the requirement to describe the significance of heritage assets including contribution to setting, this report draws together available information on the heritage assets impacted by the Proposed Development. This HS considers the Proposed Development, with the historic development of the area and its immediate environs also discussed to inform this process.
- 1.1.7 This report enables relevant parties to assess the significance of the designated heritage assets, thus enabling potential impacts to be identified along with the need for mitigative strategies.

1.2 Location and Description

- 1.2.1 The SMC is located within Ellesmere Port on the south side of the Mersey Estuary near Liverpool and covers an area of approximately 600ha. The Proposed Development would be positioned adjacent to the existing CHP Facility, occupying a plot size of approximately 67.32ha within the SMC.
- 1.2.2 The Thornton-le-Moors Conservation Area is located approximately 20m south of the Red Line Boundary. The designation incorporates the Grade I listed Church of St Mary in Thornton-le-Moors (**NHLE: 1330242; Plate 1**), which was originally constructed in the 14th century, and would have been the focal point of settlement within the medieval village. The existing designation incorporates Thornton Green Lane and Poole Lane, which are now predominantly comprised of residential properties, with Thornton Hall and barns being used for agricultural purposes and Hayrack Church Farm Park and Café being located in the northwestern corner of the Conservation Area (**Plate 1 to Plate 9**). Although the village has earlier roots associated with the Church, the majority of the buildings within the village were constructed in the 19th century as part of the post-enclosure agricultural field systems within the area.
- 1.2.3 In addition to the Grade I listed Church of St Mary, there are eight Grade II Listed Buildings located within the CA, including:
- Retaining Wall Bounding Churchyard of St Mary's Church on West, South and half on East Side including Gate Piers at southwest corner' (**NHLE: 1130655; Plate 1**);
 - 'Table Tomb to John Davies of Dunham, southeast of Church of St Mary' (**NHLE: 1145887; Plate 2**);
 - Yew Tree House (**NHLE: 1130651; Plate 4**);

- ‘Church House Farmhouse Including Shippon Abutting on North’ (**NHLE: 1330240; Plate 5**);
- Glebe Farmhouse (**NHLE: 1130652; Plate 6**);
- Thornton Hall (**NHLE: 1130653; Plate 8**);
- Barn to the northeast of Thornton Hall (**NHLE: 1130654; Plate 8**); and
- ‘Church Farmhouse including cottage wing to west’ (**NHLE: 1330241; Plate 9**).

1.2.4 There is no conservation area appraisal that has been carried out for the Thornton-le-Moors designation.

1.2.5 The Ince Conservation Area is approximately 10m to the north of the Red Line Boundary. The designation incorporates the Grade I listed ‘Manor House of Abbey of St Werburgh Chester, including Old Hall and Monastery Cottages’ (**NHLE 1138810; Plate 10**) which was constructed in the early medieval period and the central point around which Ince grew as a settlement, as well as the Grade II* listed Church of St James (**NHLE: 1138815; Plate 11**), which dates to the 14th century. The existing designation incorporates Pool Lane, Station Road and Kinsey’s Lane which are now primarily used for residential purposes though Kinsey’s Lane runs through agricultural fields. The Conservation Area incorporates woodland to the south alongside Pool Lane. The majority of the buildings in the designation date to the post-medieval or modern periods.

1.2.6 In addition to the Grade I Manor House and Grade II* Church of St. James there are twenty-one Grade II listed buildings located within the Conservation Area, namely:

- Grade II listed ‘Lower Green Farmhouse with wall to front garden’ (**NHLE: 1086967; Plate 12**);
- Grade II listed ‘Park Cottages’ (**NHLE: 1130341**);
- Grade II listed ‘Wood Farm Farmhouse’ (**NHLE: 1130342**);
- Grade II listed ‘Barn at Wood Farm 100m south of Farmhouse’ (**NHLE: 1130343**);
- Grade II listed ‘Portion of boundary wall between the Square and entrance to the Manor House’ (**NHLE: 1130346**);
- Grade II listed ‘Farm buildings abutting manor houses to southeast’ (**NHLE:1138811; Plate 13**);
- Grade II listed ‘Churchyard wall at St James’ Church’ (**NHLE: 1138813**);
- Grade II listed ‘Lamp post in churchyard by north gate’ (**NHLE: 1138814**);

- Grade II listed 'Coronation lamp post and lantern' (**NHLE: 1138818**);
- Grade II listed 'Outbuilding attached to south end of Village Green Farm facing the Square' (**NHLE: 1138819**);
- Grade II listed 'Shippon at Lower Green Farm on east side of Farmyard' (**NHLE: 1138820**);
- Grade II listed 'K6 Telephone Kiosk' (**NHLE: 1138824**);
- Grade II listed 'Proffit's Lodge' (**NHLE: 1145881**);
- Grade II listed 'T-shaped shippon at Hall Farm 30m south of Farmhouse' (**NHLE: 1318873**);
- Grade II listed 'Portion of boundary wall between junction of Kinsey's Lane with Pool Lane and Park Cottages' (**NHLE: 1318905**);
- Grade II listed 'Shippon on Wood Farm 30m south of Farmhouse' (**NHLE: 1318909; Plate 14**);
- Grade II listed 'Stocks adjacent to Ince Manor House' (**NHLE: 1329994**);
- Grade II listed 'Yew Tree Farmhouse and attached shippon' (**NHLE: 1330393, Plate 15**);
- Grade II listed 'L-shaped shippon at Hall Farm 50m southwest of Farmhouse' (**NHLE: 1330394; Plate 16**);
- Grade II listed '1, 2 and 3 with attached front garden walls' (**NHLE: 1335894**); and,
- Grade II listed '7, 8 and 9, the square' (**NHLE: 1335917; Plate 17**).

1.2.7 The Elton Conservation Area is located approximately 700m to the east of the Red Line Boundary. The designation contains the Grade II* listed Rock Farmhouse (**NHLE: 1138369; Plate 18**), which dates to the 17th century. The Conservation Area incorporates Ince Lane, which are predominantly comprised of residential properties. The Wheelwright Arms sits on the west edge of the designation.

1.2.8 In addition to the Grade II* Rock Farmhouse there are five Grade II listed buildings within the Conservation Area, namely:

- Grade II listed 17th century 'Barn, now workshops' (**NHLE: 1115394; Plate 19**);
- Grade II listed 17th century 'Cross Cottage' (**NHLE: 1115418; Plate 20**);
- Grade II listed early 18th century 'Laurels Farmhouse' (**NHLE: 1330218; Plate 21**);
- Grade II listed 20th century K6 Telephone Kiosk (**NHLE: 1320225**); and,

- Grade II listed late 18th century 'Farm buildings at Laurel Farm' (NHLE: 1320457; Plate 22).

1.2.9 There is no Conservation Area Appraisal that has been carried out for Elton.

Plate 1: Front (south-facing) elevation to the Grade I listed Church of St Mary (NHLE 1330242), bounded by a retaining wall (NHLE: 1130655) facing north



Plate 2: Table Tomb to John Davies of Durham, southeast of Church of St Mary (NHLE: 1145887)



Plate 3: View from junction of Church Lane and Pool Lane towards the SMC, facing north



Plate 4: Front (west-facing) elevation of Yew Tree Farmhouse (NHLE: 1130651), facing east



Plate 5: Front elevation (east-facing) of Church House Farmhouse Including Shippon Abutting on North (NHLE: 1330240), facing southwest



Plate 6: Front (east-facing) elevation of Glebe Farmhouse (NHLE: 1130652), facing northwest



Plate 7: View from Pool Lane looking towards the SMC, facing north. Note that Thornton Hall (red arrow; NHLE: 1130653) can be seen in the background



Plate 8: Thornton Hall Farm, with the Grade II Listed Barn to the northeast of Thornton Hall (NHLE: 1130654) indicated by the red arrow. One of the chimneys from the SMC is also visible. Looking northeast



Plate 9: Church Farmhouse including Cottage Wing to West, Pool Lane (NHLE: 1330241), indicated by the red arrow (looking north). One of the chimneys from the SMC is also visible

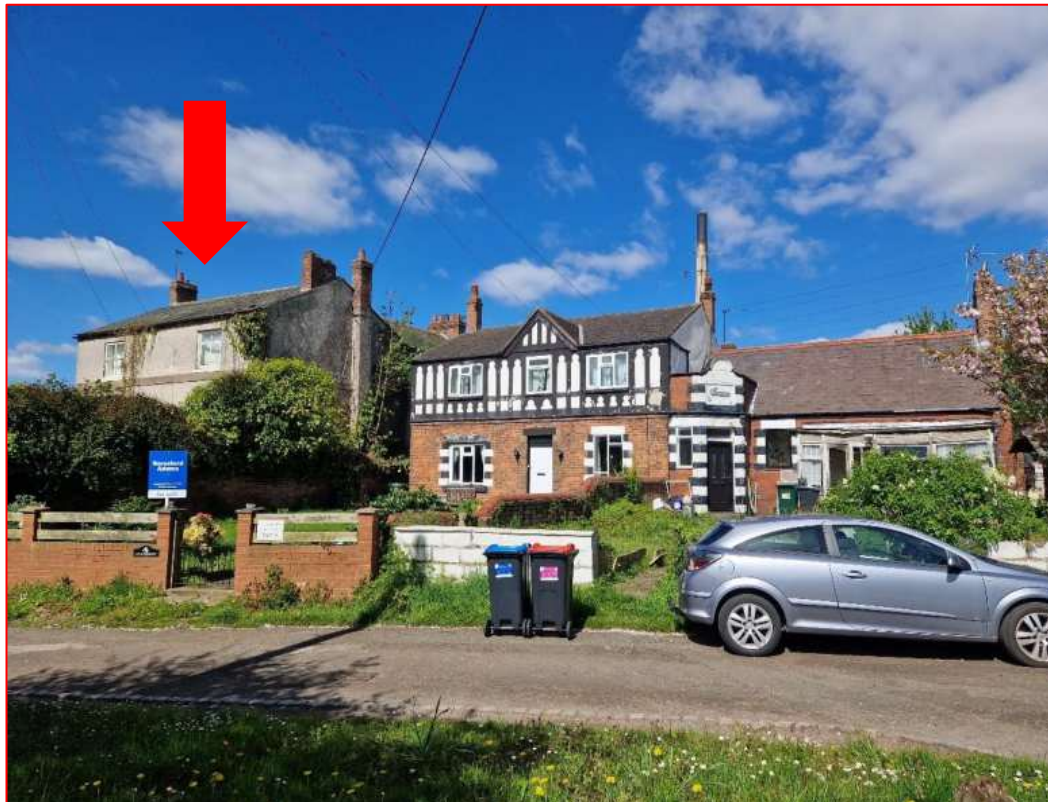


Plate 10: View looking west at Manor House of Abbey of St Werburgh Chester, including Old Hall and Monastery Cottages' (NHLE 1138810)



Plate 11: View looking north at Church of St James (NHLE: 1138815)



Plate 12: Lower Green Farmhouse with wall to front garden (NHLE: 1086967)



Plate 13: Farm buildings abutting manor houses to southeast (NHLE: 1138811)



Plate 14: Shippon on Wood Farm 30m south of farmhouse (NHLE: 1318909)



Plate 15: Yew Tree Farmhouse and attached Shippon (NHLE: 1330393)



Plate 16: L-Shaped Shippon at Hall Farm 50m southwest of farmhouse (NHLE: 1330394)



Plate 17: Numbers 7, 8 and 9, the Square (NHLE: 1335917)



Plate 18: Rock Farmhouse (NHLE: 118369)



Plate 19: Barn, now workshops (NHLE:1115394)



Plate 20: Cross Cottage (NHLE: 1115418)



Plate 21: Laurels Farmhouse (NHLE: 1330218)



Plate 22: Farm buildings at Laurel Farm (NHLE: 1320457)



2. Planning Legislation, Policy, and Development Plan Framework

2.1 National Planning Legislation

Planning (Listed Buildings and Conservation Areas) Act 1990

- 2.1.1 The *Planning (Listed Buildings and Conservation Areas) Act 1990* (hereafter referred to as ‘the Act’) sets out the legal requirements for the control of development and alterations which affect listed buildings or conservation areas (including buildings of heritage interest which lie within a conservation area). Special regard should be given to the desirability of preserved the building or its setting, or any features of special architectural interest which it possesses. The Act does not make specific provision with regard to the setting of a conservation area, that is provided by the policy framework outlined below.

National Planning Policy Framework (NPPF 2024) and National Planning Practice Guidance (NPPG 2019)

- 2.1.2 Section 16 of the NPPF deals with ‘Conserving and Enhancing the Historic Environment’. The NPPF requires the significance of heritage assets to be considered in the planning process, whether designated or not. Paragraph 207 states that planning decisions should be based on the significance of the heritage asset, and that the level of detail supplied by an applicant should be proportionate to the importance of the asset and should be no more than sufficient to understand the potential impact of the proposal upon the significance of that asset.
- 2.1.3 The NPPF is supported by the NPPG. Paragraph 18a-001 of the NPPG makes a clear statement that any decisions relating to listed buildings and their settings and conservation areas must address the statutory considerations of the Act, as well as satisfying the relevant policies within the NPPF and the Local Plan.
- 2.1.4 Paragraph 18a-013 of the NPPG outlines that the assessment of the impact of a development on the setting of a heritage asset needs to take into account and be proportionate to the significance of the asset being considered, and the degree to which the development enhances or detracts from the significance of the asset and the ability to appreciate the significance.
- 2.1.5 The key test in NPPF paragraphs 212-216 is whether a development will result in substantial harm or less than substantial harm. However, substantial harm is not defined in the NPPF. Paragraph 18a-018 of the NPPG provides additional

guidance on substantial harm. Paragraph 215 of the NPPF outlines that where a development results in less than substantial harm to the significance of a heritage asset, the harm arising should be weighed against the public benefits accruing from the development.

2.2 Local Planning Policy

2.2.1 The Cheshire West and Chester Local Plan has two parts (Part 1- Strategic Policies and Part 2 – Land Allocations and Detailed Policies), which were adopted in January 2015 and 2019 respectively (Cheshire West and Chester Council, 2015). There are four policies relating to the Historic Environment which are relevant to this report within the Local Plan, which are:

- ENV5 – Historic Environment - sets out the policy for protecting the borough's unique and significant heritage assets.
- DM46 – Development in Conservation Areas – sets out the policy for development to pay special attention to the desirability of preserving or enhancing the character or appearance of a conservation area, including development within the setting of that conservation area.
- DM47 – Listed Buildings – sets out the policy for development to have special regard to the desirability of preserving the building or its setting, and any features of special architectural or historic interest which it possesses.
- DM48 – Non-designated heritage assets – sets out the policy for development to preserve or enhance the significance of non-designated heritage assets.

2.3 Relevant National Guidance

2.3.1 Historic England has produced a number of Good Practice Advice notes (GPAs) that provide supporting information on good practice, particularly looking at the principles of how national policy and guidance can be applied. The following two GPAs are of relevance to this heritage statement:

- Historic Environment Good Practice Advice in Planning Note 2: Managing Significance in Decision-Taking in the Historic Environment; and
- Historic Environment Good Practice Advice In Planning Note 3: The Setting of Heritage Assets.

3. Methodology and Sources

3.1 Research

3.1.1 A range of data sources were used in the research for this HS, all of which are referenced in the text and detailed in the full list of references in the **References** section at the end of this report. **Table 3.1** provides a summary of the key data sources.

Table 3.1 Data Sources Consulted

Sources	Data	Comment
Historic England (HE)	National Heritage List for England (NHLE) with information on statutorily designated heritage assets	Statutory designations (scheduled monuments; statutorily listed buildings; registered parks and gardens; historic battlefields) can provide a significant constraint to development.
Cheshire West and Chester Council	Cheshire Archives	Primary repository of historical information. Includes local knowledge, documentary and cartographic sources.
Local Planning Authority	Conservation Areas	An area of special architectural or historic interest the character or appearance of which it is desirable to preserve or enhance.
Local Planning Authority	Locally Listed Buildings	Building of local importance designated by the local planning authority due to architectural and/or historic significance and a positive contributor to the character of an area. Whilst not statutorily protected, a building's inclusion on the list means that it is a material consideration in the planning process.
Groundsure	Ordnance Survey maps from the 1 st edition (1860-70s) to present day.	Provides a good indication of past land use and impacts which may have compromised archaeological survival. Provides an indication of the possible date of any buildings on the Site.
Google	Satellite imagery and Streetview	General mapping and visual information of the Site and surrounds.

Sources	Data	Comment
Internet	Web-published local history	Many key documentary sources, such as the Victoria County History and local and specialist studies are now published on the web and can be used to inform the archaeological and historical background.

- 3.1.2 This report sets out the history of the Site and its immediate environment (**Section 4** below), the significance of those heritage assets that will potentially be affected by the Proposed Development (**Section 5** below) and assesses the impact of the Proposed Development in relation to relevant policy (**Section 6** below).
- 3.1.3 To provide historic background context and to inform the assessment of setting, a 1km radius Study Area around the Site was considered. The extent of the Study Area was defined using professional judgement to capture the setting of the Thornton-le-Moors, Ince and Elton conservation areas. Occasionally there may be reference to heritage assets beyond this Study Area, where appropriate, e.g. where such assets are particularly significant and/or where they contribute to current understanding of the historic environment.
- 3.1.4 **Figure 1: Historic Environment Features Map of Appendix B: Figures** shows the location of selected designated heritage assets within the Study Area, as identified by the sources above, a site visit, or during the course of research for this assessment.

3.2 Site Visit

- 3.2.1 A site visit was carried out on the 24 April 2024 to visually inspect the area around the Site as part of the Phase 1 works. A follow up site visit was carried on the 20 May 2026 for the Phase 2 works. This included a walkover of Thornton-le-Moors, Ince and Elton in order to take photographs and record notes. The visual inspection formed the basis of a basic visual appraisal of the heritage assets, and the Site walkover collected data on other designated assets for input into the report and in considering setting. The conservation area designations and the listed buildings considered in this assessment are shown in **Figure 1: Historic Environment Features Map of Appendix B: Figures**.
- 3.2.2 An internal inspection of the listed buildings was not considered warranted or feasible for this work, given the nature of the Proposed Development.

3.3 Assessing Heritage Significance

- 3.3.1 The NPPF defines significance as “*The value of a heritage asset to this and future generations because of its heritage interest. That interest may be historic, archaeological, architectural or artistic.*”
- 3.3.2 The determination of the significance is based on statutory designation and/or professional judgement against these values. Guidance is also provided in Historic England’s *Advice Note 12 – Statements of Heritage Significance: Analysing Significance in Heritage Assets* (2019).
- 3.3.3 The NPPF sets out the four heritage value categories within the NPPF significance definition as:
- **Archaeological Interest:** As defined in the Glossary to the NPPF, there will be archaeological interest in a heritage asset if it holds, or potentially holds, evidence of past human activity worthy of expert investigation at some point.
 - **Architectural and Artistic Interest:** These are interests in the design and general aesthetics of a place. They can arise from conscious design or fortuitously from the way the heritage asset has evolved. More specifically, architectural interest is an interest in the art or science of the design, construction, craftsmanship and decoration of buildings and structures of all types. Artistic interest is an interest in other human creative skill, like sculpture.
 - **Historic Interest:** An interest in past lives and events (including pre-historic). Heritage assets can illustrate or be associated with them. Heritage assets with historic interest not only provide a material record of our nation’s history but can also provide meaning for communities derived from their collective experience of a place and can symbolise wider values such as faith and cultural identity.
- 3.3.4 These categories encompass the criteria that Historic England are obliged to consider when statutorily designating heritage assets. Each asset is evaluated against the range of criteria listed above on a case-by-case basis. Unless the nature and exact extent of buried archaeological remains within any given area has been determined through prior investigation, significance is often uncertain.
- 3.3.5 In relation to designated heritage assets, the assessment considers the contribution which the historic character and setting make to the overall significance of the asset.
- 3.3.6 **Table 3.2** gives examples of the significance of designated and non-designated heritage assets.

Table 3.2 Value of Heritage Assets

Heritage Asset Description	Value
World Heritage Sites	Very High
Scheduled Monuments. Grade I Listed Buildings. Grade II* Listed Buildings. Grade II Listed Buildings which can be shown to have exceptional qualities in their fabric or historical associations, or which are clearly associated with heritage assets of high, national significance. CAs containing buildings of great importance. Undesignated structures of clear national importance. Undesignated below ground heritage assets of clear national importance.	High
Grade II Listed Buildings which can be shown to have qualities in their fabric or historical association of regional importance only. Historic (unlisted) buildings that can be shown to have exceptional qualities in their fabric or historical associations. CAs containing buildings that contribute significantly to its historic character. Historic Townscape or built-up areas with important historic integrity in their buildings, or built settings. Known buried heritage assets of regional importance.	Medium
Locally Listed Buildings. Historic (unlisted) buildings of modest quality in their fabric or historical association. Historic Townscape or built-up areas of limited historic integrity in their buildings, or built settings. Known buried heritage assets of local importance.	Low
Buildings of no architectural or historical note; buildings of intrusive character.	Negligible
Buildings with some hidden (i.e. inaccessible) potential for historical significance. Unknown buried heritage assets.	Uncertain

3.4 Assessing Harm

- 3.4.1 Professional judgement is used to consider the impact (the magnitude of change) of future development on the significance of a known or potential heritage asset. This is assessed in NPPF terms as ‘no harm’, ‘less than substantial harm’ and ‘substantial harm’ (or ‘total loss of significance’). For the purposes of assessing the

likely impact on significance resulting from the Proposed Development and the subsequent impact on the settings of the identified heritage assets (**Section 4**), established criteria have been employed. These are set out below:

- If the Proposed Development will enhance heritage values or the ability to appreciate them, then the impact on heritage significance will be deemed positive.
- If the Proposed Development fails to sustain historic values or impair their appreciation, then the impact will be deemed negative.
- If the Proposed Development preserves the heritage values, then the impact will be deemed neutral.

3.4.2 Within the three categories identified above there are four different levels that can be given to identify the intensity of impact. These are derived from:

- **Negligible:** impacts considered to cause no material change.
- **Minimal:** impacts considered to make a small difference to the ability to understand and appreciate the heritage value of a heritage asset. A Minimal impact may also be defined as involving receptors of low sensitivity exposed to intrusion, obstruction or change of low to medium magnitudes for short periods of time. This would result in a low level of less than substantial harm to designated heritage assets and a low/medium level of harm to non-designated heritage assets.
- **Moderate:** impacts considered to make an appreciable difference to the ability to understand or appreciate the heritage value of an asset. This would result in a medium/high level of less than substantial harm to designated heritage assets or a high level of harm to non-designated heritage assets.
- **Major:** impacts considered to cause a fundamental change in the appreciation of the heritage asset. This would result in substantial harm to designated heritage assets.

3.5 Assessing the contribution of setting

3.5.1 In relation to designated heritage assets, the assessment considers the contribution that setting makes to the overall significance of the asset.

3.5.2 The NPPF definition for setting is outlined in **Section 2** above. It is the way in which the asset is understood (i.e. historical values) and experienced (architectural and communal values). It is not an asset in itself. It differs from curtilage (historic/present property boundary); context (association with other assets irrespective of distance) and historic character (sum of all historic attributes, including setting, associations, and visual aspects).

3.5.3 Guidance produced by Historic England (*Historic Environment Good Practice Advice In Planning Note 3: The Setting of Heritage Assets*, 2017) uses a stepped approach for settings assessment. It sets out five steps of which the first four are relevant:

- Step 1: Asset identification. The NPPF requires an approach that is proportional to the significance of the asset, and for this reason only the settings of the most sensitive (i.e. designated) heritage assets are considered in this assessment. A scoping exercise filters out those assets which would be unaffected, typically where there are no views to/from the Site.
- Step 2: Assess the contribution of setting. This stage assesses how setting contributes to the overall significance of a designated asset.
- Step 3: Assess change. This considers the effect of the proposals on asset significance. It is noted however that it can be difficult to quantify such change to the overall significance of a designated heritage asset (for example, significance would rarely be downgraded from 'high' to 'medium' due to changes in setting). For this reason, the impact is reported in this assessment in terms of the extent to which the proposals would change how the asset is understood and experienced (in terms of no harm, less than substantial harm, substantial harm or total loss of significance).
- Step 4: Mitigation. This explores the way to maximise enhancement and avoid or minimise harm. This is typically considered at the design stage (i.e. embedded design mitigation).
- Step 5: Reporting. Making and documenting decisions and outcomes. This reports the assessment of effects.

3.5.4 The assessment has considered the physical surroundings of the heritage assets affected, including topography and intervening development and vegetation. It also considers how the heritage assets are currently experienced and understood through their setting, in particular views to and from the assets and the Site, along with key views, and the extent to which setting may have already been compromised.

4. Historical Development and Identification of Heritage Assets

4.1 Introduction

- 4.1.1 The following section presents a more recent historical development of the Site and Study Area through the results of a map regression exercise and review of relevant background documentation.
- 4.1.2 The location of designated and non-designated built heritage assets within and surrounding the Site are also discussed below; those designated heritage assets within and in the wider vicinity (within 1km) of the Site are shown on **Figure 1: Historic Environment Features Map of Appendix B: Figures**. Heritage assets are referred to by either their NHLE listing number (e.g. NHLE: 1138810) or an internal 'A' reference (e.g. A1).

4.2 Archive Material Consulted

- 4.2.1 Background information was identified in the Chester Record Office. The following documents were consulted:
- On the Importance of Fourteenth Century Planning in the Construction of the Churches of Cheshire: Journal of the Chester Archaeological Society (JCAS) New Series, Volume 32, part I 1937, p5-52 Illus: Ref: 011289;
 - Cheshire Churches - Morant, Roland W – Ref: 124666;
 - Old Cheshire Churches Richards, Raymond - Ref: 200482;
 - The Buildings of England: Cheshire – Pevsner - Ref: 200490;
 - The Cheshire Village Book – Cheshire Federation of Women's Institutes – Ref: 202914;
 - 13th Century Church is Full of Historical Interest. Merlin John – Ref 204603;
 - Some Account of the Parish of Thornton – Barker, T F (Compiler) – Ref: 205672;
 - Thornton-le-Moors with Ince and Elton: A Land of Contrasts. – Peter H Allan – Ref: 215854;
 - Images of England: Chester District. Pat O'Brien (Compiler) – Ref 216235;

- Thornton-le-Moors Rectory and glebe: dilapidations and related papers – Ref: D 7215/25;
- Historical notes and papers of Kathlyn Peate, re Thornton-le-Moors, Elton, Ince etc – Ref: D 7215/39;
- George Storey research material – Ref: D 8965;
- Thornton-le-Moors, St Mary the Virgin – Ref: EDA 17/3952/957;
- Thornton-le-Moors, St Mary the Virgin – Ref: EDA 17/3952/958;
- Chester and Manchester Direct Railway. – Ref: QDP 251;
- Shell Stanlow Refinery– Refs: LBE 8436/6/1-6;
- Picturesque Wirral: Illustrated in a Series of Views from Original Photographs – Ref: 010515;
- Our local heritage – O'Brien – Ref: 010550;
- A Cheshire parish; being a short history of Ince, drawn from the parish records and other sources – Slater – Ref: 103185;
- The Manchester Ship Canal. – Fairhall – Ref: 146365;
- Britain's New Industry: Stanlow 1949 – Ref: 200571;
- A Monk & Company Limited, Civil Engineering and Building Contractors – Ref: 201593;
- Shell Chemical Plant, Stanlow, Cheshire. – Ref: 204630;
- A History of the Modern British Chemical Industry – Ref: 209686;
- Stanlow Chemical Plant – Ref: 212935;
- Ince by Inch. – Cheshire Life – ref: 216701;
- The Search for Old Wirral: A Historical Guide to Wirral's Buildings and Sites from Roman Times to the Civil War. – Randall David – Ref: 218055; and
- Stanlow photographs – Ref: 231318.

4.3 Historical Background

4.3.1

Ellesmere Port would have been under glacial sheets during the early prehistoric period. There has been no evidence specifically identified at Ellesmere Port relating to the later prehistoric periods, although Neolithic finds and Bronze Age settlement and funerary activities have been identified in the Mersey and Wirral

areas of Cheshire, and Iron Age forts have been identified along the mid-Cheshire Ridge (Jones, 2018).

- 4.3.2 The Cheshire Historic Towns Survey (Clark *et al.*, 2013) indicates that there are four main periods where urban settlements were identified in Cheshire, with the first being in the Roman period. Focal points for Roman urban occupation are at the Roman fort at Chester, and at production areas to the east of Middlewich, Nantwich and around the Warrington area (Cheshire County Council, 2003). The Rural Roman Settlement of Roman Britain indicates that there have been no rural settlements in the Ellesmere Port region. The Roman routes running from Chester to Wilderspool (Warrington) (Route 701 as noted by Margary) and Chester to the Wirral (Route 670 as noted by Margary) run approximately 3.5km to the southeast and 7.5km to the southwest of the Red Line Boundary (Allen *et al.*, 2018). It is likely that the Site sat within the agricultural hinterlands of the Roman settlements.
- 4.3.3 Although early medieval period activities are still hard to identify through the archaeological record in the region, the Domesday Book entries from 1086 record a settlement of five households at Thornton-le-Moors, with this placename meaning ‘Thorn-tree Farm’ by the moor (Powell-Smith, 2026). There were also six households at Stanney and [Little] Stanney (meaning ‘Stone Island’), approximately 2km to the southwest of the Red Line Boundary, 11 households at Ince (meaning ‘Island’), approximately 1.5km to the northeast of the Red Line Boundary, and 9 households at Elton (meaning ‘eel farm/settlement’), approximately 1.3km to the east of the Red Line Boundary. Although small-scale, this highlights that there would have been settlements (and associated agricultural activities) in this landscape that had been established here prior to the medieval period. However, given the place-name evidence, it is also possible that prior to the early medieval period, the land within the Site would not have been habitable as it may have been in marshy and boggy land/may have been under water, as Ince and Stanney have been indicated as ‘islands’ in 1086 (The English Place Names Society, 2024).
- 4.3.4 Stanlow Abbey (**NHLE: 1011117**) was founded in the 12th century, situated approximately 2km to the north of the Site, north of the Manchester Ship Canal. Although not much remains of the Abbey, it’s a rare example of a small former Cistercian monastery latterly functioning as a monastic grange. The re-use is particularly unusual because it represents reuse of a small, failed monastery, with the monastery being abandoned by the end of the 13th century. Monasteries were usually centres of immense wealth and political influence, so its failure in what would have been a known stronghold for Cistercian monks is very rare (Historic England, 2024).
- 4.3.5 Thornton-le-Moors township was centred at Thornton Hall, which would have been the seat of the manor from the Domesday period. The township was passed

through a number of hands during the medieval period, indicating that Thornton-le-Moors was a place for the wealthy to reside during the period. Ince also was the seat of a Manor Hall, indicating the centres of settlement during the medieval period (Cheshire Archives reference: D 7215/39).

- 4.3.6 The wider landscape was predominantly agricultural during the post-medieval period, with the Tithe Map of Churchdown indicating that the Site was situated within agricultural field systems that extended across what is now the SMC (see **Figure 2: Thornton-le-Moors Tithe Map of 1838 of Appendix B: Figures**).
- 4.3.7 Ellesmere Port developed as a settlement in line with the development of the industrial activities in the wider landscape from the mid-19th century. The Manchester Ship Canal's construction adjacent to the River Mersey from the late 19th century allowed for the transportation of industrial goods overseas. Industrial complexes developed along the Ship Canal in order to utilise this new form of transportation across a wider landscape than previously from railways alone. The increasing demand for workers to meet the demands of industrial developments along the coastline meant that a new settlement was developed in Ellesmere Port to house the workers and their families in the local area

Development of the Site and Stanlow Manufacturing Complex

- 4.3.8 The Site remained predominantly undeveloped until the early 20th century, with the Site divided between the parishes of Thornton-le-Moors and Ince. No enclosure or Tithe map was available to view from the Cheshire Archives for Ince Parish, which would have encompassed the eastern part of the Site. The 1838 Tithe map of Thornton-le-Moors indicates that there was a road running northwest to southeast through the western part of the Site (**Figure 2: Thornton-le-Moors Tithe Map of 1838 of Appendix B: Figures**). The mapping also indicates an oblong feature within the centre of the Site, which the transcription indicates might be a hill. The Tithe map indicates that the rest of the Site to the west of the hedgerow is split between five agricultural fields, used for pasture. **Figure 3: First Edition Ordnance Survey map 25" 1873-4 of Appendix B: Figures** shows that subsequently the eastern part of the Site was also used for agricultural land.
- 4.3.9 There appears to be limited changes within the Site in the early part of the 20th century, with **Figure 4: Ordnance Survey 1:10,000 map of 1938 of Appendix B: Figures** indicating that the Site was still agricultural in nature at this time.
- 4.3.10 However, Shell had chosen the siting of the SMC by 1922, on the banks of the Manchester Ship Canal. Initially the plant was dedicated to the discharge and storage of oil cargoes from overseas. The manufacturing and processing of petrochemicals continually developed during the 20th century, in line with meeting the demands of the economy and in line with new technologies and processes being

developed by Shell (Jones, 2018). The plant also produced aviation lubricants for the Allied Forces during World War II. Photos of the SMC show the mass-scale of the construction in 1948, demonstrating the mass operation being conducted in the plant (Shell Petrol Company, 1949) (**Plates 23-27**).

4.3.11 **Figure 5: Provisional Ordnance Survey 1:10,000 Map of 1967-8 of Annex B: Figures** demonstrates that the SMC had been well developed by this time. **Figure 6: 1970 Plan of Stanlow Plant of Annex B: Figures**, indicates the types of structures within the SMC by this time. This includes cooling towers, pumphouses, steam generator units, distillation buildings and treater feed tanks. Within the Site itself, there is a store that is indicated to be present within the Site, which is currently still extant today. The riggers yard is also present within the Site, as well as other unnamed structures and features.

4.3.12 The SMC is still present today, now encompassing an area of approximately 600ha.

Plate 23: Photographs of the Stanlow Plant in 1948, showing the initial construction phases of the SMC (Cheshire Archives reference: 231318)



Plate 24: Photographs of the Stanlow Plant in 1948, showing the initial construction phases of the SMC (Cheshire Archives reference: 231318)



Plate 25: Photographs of the Stanlow Plant in 1948, showing the initial construction phases of the SMC (Cheshire Archives reference: 231318)



Plate 26: Photographs of the Stanlow Plant in 1948, showing the initial construction phases of the SMC (Cheshire Archives reference: 231318)



Plate 27: Photographs of the Stanlow Plant in 1948, showing the initial construction phases of the SMC (Cheshire Archives reference: 231318)



4.4 Heritage Assets Located Within and in Vicinity of the Site

Within the Site

- 4.4.1 There are no designated heritage assets within the Site. However, cartographic evidence suggests that there is a storage building that has been present within the Site since at least 1970, in relation to the development of the SMC.
- 4.4.2 No visit was carried out within the Site as it was not deemed necessary due to its industrial nature. No heritage assets of any significance survive within the Site, which has been heavily developed since the foundation of the SMC. The interiors of the buildings within the Site were not accessed during the site visit, and therefore we cannot ascertain their current condition.
- 4.4.3 The SMC is defined by its 20th century industrial buildings, which are important and positive contributors to the character and appearance of the industrial plant.

Heritage Assets in Vicinity of the Site

Thornton-Le-Moors CA (A40)

- 4.4.4 The Site is located approximately 20m to the north of the Thornton-le-Moors CA (A11), which was designated in October 1981 (and extended in October in 1996), centred around the Church of St Mary, which was constructed in the 14th century (**Plates 1 to 10, 16 to 22**). There is no conservation area appraisal available for this area.
- 4.4.5 There has been small-scale settlement within Thornton-le-Moors since at least the medieval period. This is demonstrated by its documentary mention in the Domesday Book, with five households at the settlement, and the placename meaning of ‘Thorn-tree Farm by the moor’ (Cheshire Archives reference: 231318). Even in this early mention, there had been reference to a church, indicating a long ecclesiastical presence here, prior to the current Church of St Mary that has been upstanding since the 14th century.
- 4.4.6 Research has indicated that the village was granted from Richard de Aldeford to Peter le Roter, Clerk of the Lord the Earl of Chester, in a deed dated to 1215. The Roters family occupied the township for a further 85 years, before coming into the hands of Peter de Thornton in the 1300s and subsequently passing hands numerous times through the medieval and post-medieval periods (Powell-Smith 2026).
- 4.4.7 The Church of St Mary (**NHLE: 1330242; A1**) would have been the centre of the later medieval and post-medieval settlement in Thornton-le-Moors. The

Conservation Area is defined by its 17-19th century agricultural and domestic buildings, which are important and positive contributors to the character and appearance of the village. The dominant facing material to buildings is red brick, in a mixture of 1, 2 and 3 storeys, with slate roofs. Some of these buildings include:

- Church House Farmhouse Including Shippon Abutting on North (**NHLE: 1130240; Plate 5; A8**);
- Thornton Hall (**NHLE: 1130653; Plate 8; A4**);
- Barn to the North-East of Thornton Hall (**NHLE: 1130654; Plate 8; A5**);
- Yew Tree House (**NHLE: 1130651; Plate 4; A2**); and
- Glebe Farmhouse (**NHLE: 1130652; Plate 6; A3**).

4.4.8

The size of these domestic farmhouses demonstrates the wealth of the farmers living in the village during the post-medieval period, after the Enclosure Act of 1773 had been enacted. The asset still retains much of its rural and agricultural character within the Conservation Area, with the village green still a key central feature of the designation, as well as green spaces in the northwestern and northeastern part of the Conservation Area (**Plates 28 to 34**).

Plate 28: The Parish Room at Thornton-le-Moors, constructed in 1896 and used initially as an Infant School, facing northwest



Plate 29: View along Niddries Lane from the Parish Room, facing north towards the SMC



Plate 30: View from Poole Lane in the northeastern part of the Conservation Area, towards the Thornton Hall farm complex, facing southeast



Plate 31: View from Poole Lane, in the northeastern part of the Conservation Area, towards the SMC



Plate 32: View from the eastern half of the Churchyard at the Church of St Mary toward the SMC, facing north



Plate 33: View from the junction of Poole Lane and Thornton Green Lane, facing southeast towards the southern part of the Conservation Area



Plate 34: View from entrance of Thornton Hall Farm towards the SMC, facing northwest



Church of St Mary (NHLE: 1330242; A1)

4.4.9 There has been a long ecclesiastical history in the village of Thornton-le-Moors, with the Domesday Book entry for the village indicating the site of a pre-conquest church here. The parish church served Thornton-le-Moors, Elton, Dunham Hill, Hapsford and Wimbold's Trafford until the 19th century (**Plates 35 to 40**). The NHLE listing description is as follows:

“Church. C14th onwards, probably on Site of pre-Conquest church. Red sandstone. Slate roofs. Nave, with tower in south west corner, south porch, north east chancel, south east Elton chapel. C14th embattled tower, partly rebuilt, has stepped buttresses, 3 chamfered stone bands, 2-light bell openings with 4 centred stopped hood moulds. C14th traceried 2-light window on south wall. C14th buttressed nave with chamfered plinth has 3 similar windows on south wall. 2 north wall windows are similar. One and west window are C16th, 3-light in deep recesses. C17th south porch has round arched moulded entrance, in front of C14th doorway containing door of 6 raised and fielded panels, and inscribed in the panelled head above. TD, IC [CHURCH] W[ARDEN] 1725. 3 bay chancel has 2-light C16th windows, 5-light east window has broad rounded head, and moulded hood. 2 mouchettes above lights. Perpendicular. Elton chapel in 3 bays alongside chancel has 3-light windows one replaced. Small door has 4 centred arched head. Interior. Nave is divided by central arcade of 5 pointed arches on octagonal piers. 3 bay chancel above arcade, has octagonal bases, piers and capitals. C16th chancel roof. 1695 3-sided alter rail has twisted and turned balusters, moulded rail. Altar table, with twisted and turned legs inscribed Tho Bush, Joh Johns Curch War 1694. Raised and fielded panelling with moulded cornice, round chancel walls. C17th reading desk, choir stalls, some with raised and fielded panelling and turned finials dated 16 ICE 94. Bunbury family memorial tablets, probably by Randle Holmes dating 1634-1686, painted on wood. Rev. Rowland Chambre, Rector, 1760-1796, marble tablet, in vestry/chapel. Fluted marble font, C17th. Fragments C10th cross shaft with figure and animal carvings from trench round church. C17th, probably, sandstone water stoop, on carved pedestal.”

4.4.10 The present church is constructed predominantly of red Cheshire sandstone, dating predominately to the 14th and 16th centuries. It was constructed to a through design, which would have been a nave and chancel of same width and without a chancel arch. There are eight arches dividing the nave and chancel from the south aisle, of which five are dated to the 14th century. The other three are 15th century and are obtuse in form. The chancel arch was added in the late 19th century. The chancel is a good example of medieval architecture and has the only surviving medieval roof in the Church, being described as being in the Vale of Clwyd form (Cheshire Archives reference: D 7215/39).

- 4.4.11 It is debated what the earliest element of the Church is. Some have argued that the 'piscina', which is a font that sits underneath the archway set into the south wall, is one of the earliest features of the Church. There is also debate on the exact date of the southwest tower, with some sources indicating that the tower is 14th century, but some arguing a later date of the 16th century. The altar rail is also of architectural interest, as it is a rare example of a rail surrounding an altar on three sides. There was also a fire in 1909 which caused significant damage in the western part of the Church. The tower, amongst other smaller elements, was partially rebuilt after the fire (**Plate 36 to 40**).
- 4.4.12 During the site visit, it was noted that there were remedial works being carried out. The interior of the Church could not be accessed during the site visit.

Plate 35: View from Niddries Lane towards the Church of St Mary, facing southeast



Plate 36: View of the southwest elevation to the Church of St Mary, facing northeast

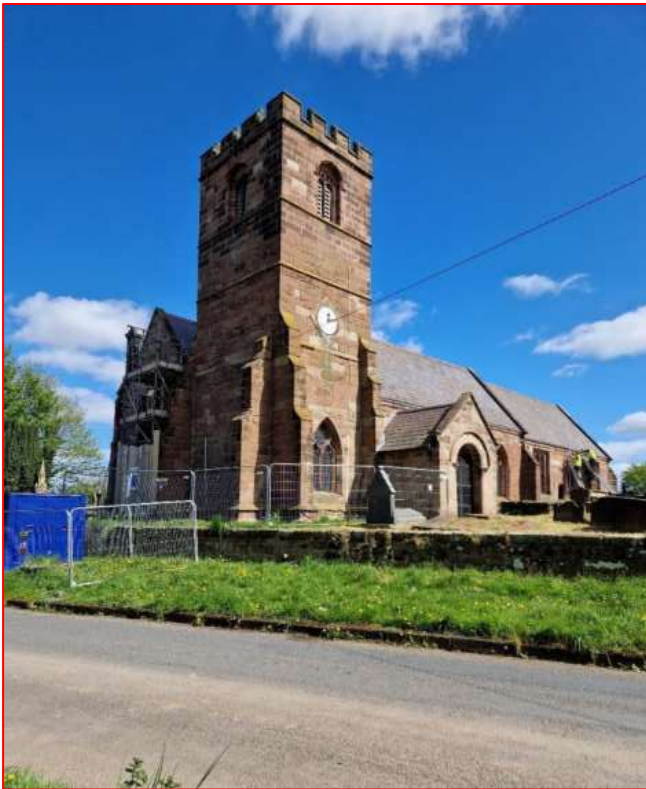


Plate 37: View of the east elevation to the Church of St Mary, facing southwest



Plate 38: View of the Church of St Mary looking towards the SMC, facing north. The War Memorial (arrowed) is visible within the graveyard, with the retaining walls enclosing the Church grounds



Plate 39: Historic photo taken between 1970 and 1998 showing the Church of St Mary Church, facing north (Archive Ref: D 7215/39)



Plate 40: Historic photo taken in 1976, showing the SMC in the background (Archive Ref: 204603)



Retaining wall bounding churchyard of the Church of St Mary on west, south and half on east side including gate piers at south west corner (NHLE: 1130655; A6)

4.4.13 The NHLE listing citation for this asset is as follows:

“Walls and gatepiers. C18th and C19th. Square coursed rubble in different builds, with plain flush or chamfered coping or none. Stands to c 4 ft high externally, on west, south and half of east side of churchyard. West of north aisle of church incorporates the wall of late C19th basement heating chamber of the Church. South part of wall on eastern side is probably c1858, when the Churchyard was extended on that side. Piers are plain posts with roll section heads between later simple scrolled iron strap. Piers are inscribed T MORRIS C[HURCH] W[ARDEN] and WM BURNELL C [HURCH] W [ARDEN] ? 1776. Retaining wall is on either side of 4 stone steps, of which 3 are old.”

4.4.14 The retaining walls would have enclosed the sacred space around the Church and would have provided structural stability to the Church and the wider complex on the higher ground (**Plate 42** and **Plate 42**).

Plate 41: View of the southern retaining wall of the Church of St Mary, facing northeast



Plate 42: View of the southern and eastern retaining walls of the Church of St Mary, facing northwest



Table Tomb to John Davies of Dunham, southeast of Church of St Mary (NHLE: 1145887; A7)

4.4.15 The NHLE listing citation for this asset is as follows:

“Table tomb. 1726. John Davies of Dunham. Sandstone base has 2 sunk panels parts buried. Tablet top has inscription between fluted columns in shallow relief each on raised and fielded panel pedestals, and supporting round arch below which is symbolic dove.”

4.4.16 The heritage asset was not accessible during the site visit.

Church Farmhouse including Cottage wing to West (NHLE: 1330241; A9)

4.4.17 The NHLE listing citations details the following:

“Farmhouse including cottage wing to west. Probably later C18th (or possibly early C18th remodelled c1850). Rendered brick, slate roof, stone plinth and

dressings. 3 storeys with 2-storey cottage wing. L shaped plan. House has 2 windows, widely spaced, with sashes, replacing Victorian type. Central moulded doorcase has cornice hood on elongated consoles. Door of 6 panels, 1st and 2nd floor plain stone bands. 2-storey cottage wing set back has one blocked window. Interior. Iron radial-bar fanlight over inner double doors. Chamfered hardwood ceiling beams. Georgian corner cupboard, moulded architraves fielded panel doors. Stair has square balusters, turned or octagonal newels. Top floor door has wrought iron H-hinges and Suffolk latch.”

- 4.4.18 The farmhouse appears on First Edition Ordnance Survey Mapping from 1881, although it is possible that the asset was remodelled prior to this. It would have been one of a number of farmsteads in the landscape that would have been constructed after the Enclosure Act of 1773, where landowners had to live closer to the land they were working as medieval feudal system of agriculture was abandoned. The size (at 3 storeys) and construction of this farmstead indicate wealthy former residents of the property, with associations to the Church (**Plates 9, 43 and 44**).

Plate 43: Historic photo (dating between 1970-98) of Church Farmhouse (on the left of the photo), with the SMC chimney featuring in the background (Archive Ref: D 7215/39).



Plate 44: Church Farmhouse with one of the SMC chimneys visible in the background (in right of picture), facing northwest



Ince Conservation Area (A41)

- 4.4.19 The Site is located approximately 10m to the south of the Ince Conservation Area at its southernmost extent. The Conservation Area was designated in 1969 (and extended in 2004 and 2023), with its importance associated with its rural village atmosphere and character.
- 4.4.20 Ince likely developed around Ince Manor Monastic Grange (**NHLE: 1009635**) which was known to have belonged to St Werburgh's Abbey during the early medieval period, one of the Abbey's earliest recorded properties. At the time of the Domesday book, it consisted of 300 acres of arable land and meadow. The medieval importance of Ince was diminished following the dissolution of the monasteries, but it appeared to continue as a rural farming and fishing community.
- 4.4.21 During the 19th century Ince became a bathing resort location, and Ince Hall and Park expanded later in this century, giving the village the character of an estate village. In the 20th century Ince Hall was sold and subsequently demolished, returning Ince to a more modest rural character. The parkland forms the western part of the designation, with the key buildings to the east. The designation retains

its medieval street pattern, with an informal layout of buildings through the village with a formal square at its centre.

- 4.4.22 The Conservation Area is defined by its agricultural and domestic buildings which date from the medieval period through to the 19th century, and provide a positive contribution to the overall character and appearance of the village. The primary building material seen within the designation is red sandstone, the colour and large coursed stones characterising the monastic remains, church and farm buildings and cottages. Later 19th century buildings are primarily brick, but of similar colour such that they contribute towards the homogenous character of the designation (Kathryn Sather & Associates Heritage Conservation Consultants, 2023).

Plate 45: L Shaped Shippon (NHLE: 1330394)



Plate 46: Lower Green Farmhouse with wall to front garden (NHLE: 1086967)



Plate 47: 7, 8 and 9, the Square (NHLE: 1335917)



Manor House of Abbey of St Werburgh Chester, Including Old Hall and Monastery Cottages (NHLE: 1138810, A16)

4.4.23 Ince Manor has its origins in the early medieval period, being a holding of the Abbey of St Werburgh at Chester. Benedictine properties such as this were leased to secular tenants and were referred to as 'manors' rather than 'granges'. On 18 March 1399, King Richard gave the Abbot permission to crenellate and fortify his manors, including Ince. The Manor is designated as a Grade I listed building and includes the old hall and monastery cottages. Its listing description is as follows;

"Remains of Manor House of Abbey of St Werburgh. 2 rectangular blocks in roughly worked coursed sandstone forming 2 sides of courtyard. At least 5 phases of masonry, late C13th onwards. THE HALL: Modern pitched slate roof to three-quarters of building. W elevation - segmental arched doorway with hood mould; crenel slits. Horizontal coved moulding below segmental arched coving on E elevation and projecting below 2 cove-moulded arches on S elevation. Inserted post-Dissolution rectangular 4 light mullion and transom windows with bossed heads and hood mounds, some converted to doors or blocked. N wall largely rebuilt after late C19th fire. INTERIOR: Internal wall passage and stairs with Caernarvon arch coving within west and part of north and east walls. Windows set in splayed recesses with segmental arched heads. Arched doorways, some blocked, to internal passages. Temporary corrugated sheeting north wall to end of roofing. MONASTERY COTTAGES: Roofless. Formerly range of four, 2- storey late C13th-C14th lodgings, converted to 2 cottages, now derelict. 2- storey remains of tower at west end, with 1st floor room over projecting ground floor lobby. Steeped buttresses integral to building on south and north elevations. Arched round-head, pointed and ogee-head doorways. Crenel and small rectangular windows. Inserted or altered rectangular doorways and windows. Additional one storey coursed sandstone building at east end; formerly identical block to west. INTERIOR: Within tower, internal stair, now blocked, with Caernarvon arch coving, leading from lobby to possible garderobe at 1st floor. Freestanding partition wall with pointed-arch doorway at 1st floor. Deep splayed corbelled window recesses. Additional inserted openings. Stone corbels to 2nd storey floor. C17th or later fireplace with heavy beam over, to easternmost cottage. Coursed sandstone boundary wall with stone coping, connecting Hall to Monastery cottages."

4.4.24 The Manor is located on the northwest side of Ince Village Square, within grounds now designated as a scheduled monument (1009635) but may have originally encompassed a larger area. Two buildings survive, constructed of coursed red sandstone; The Old Hall with a brick farm building adjoining the south elevation, and lodgings on the east and north sides of a courtyard. Both buildings have been altered but stand as substantially medieval buildings to roof height.

- 4.4.25 The Old Hall is a rectangular building, entered from the courtyard via a medieval doorway. When the building was fortified, an arrow-slit was placed above each side of the doorway, slanted so as to command the approach from any direction. Loopholes were also placed in this wall, and a narrow passage was constructed within the wall to give access to the loopholes. At the dissolution of 1538, three rectangular mullion and transom windows were inserted on the courtyard side, four on the roadside, and two on the south side. The roadside windows have four segmental arches, with deep recessed openings inside (**Plate 48**). The windows are recessed below elliptical arches, which may have supported a parapet and crenellations in the late 14th century.
- 4.4.26 The lodgings have been converted into two cottages but may have originally been four separate chambers. The front of the lodgings facing the courtyard are divided into three bays by buttresses. The lodgings are rectangular in plan, sitting over 2 storeys. There are doors on both the ground and first floors, potentially suggesting that the lodgings were once linked to other buildings.

Plate 48: Manor House of Abbey of St Werburgh Chester, Including Old Hall and Monastery Cottages (NHLE: 1138810)



Church of St James (NHLE: 1138815, A20)

- 4.4.27 The Church of St James is located in the southern part of Ince Conservation Area, in an area surrounded by mature trees (**Plates 50-53**). The Church likely dates from the 14th century, but has seen much alteration in subsequent centuries. The NHLE listing description is as follows;

“Partly rebuilt 1854 by Edward Hodkinson. Red sandstone church with nave, north aisle, chancel and south porch roofed in grey slate, and west tower. Chancel has C14 3-light east window with original simple tracery, and two C15 2-light square-headed windows in each side wall. c.1485-93 tower by Simon Ripley, raised 2 courses in 1854, with diagonal buttresses; 2-light traceried windows to upper storey, with blank niche in west wall below. Nave (including aisle) and porch wholly rebuilt 1854 in perpendicular style. INTERIOR: C17 oak arch-braced collar roof to chancel. Bells 1622 and 1636. Late C17 altar rail with spiral turned balusters. 1634 carved oak sanctuary chair. Early C18 brass candelabrum in chancel. C19 stained glass.”

- 4.4.28 The present church is constructed of coursed red sandstone in a similar fashion to most other buildings in Ince. The chancel dates to the 14th century, and features a decorated three-light window and two 15th century two light square headed window in each side wall. The arch-braced roof dates from 1671, though has been much restored (Morant 1989). The perpendicular tower dates to the late 15th century, completed by Simon Ripley. The remainder of the Church was rebuilt in 1854 by E. Hodkinson, who raised the tower by courses.
- 4.4.29 The Churchyard wall which forms the boundary of the Churchyard is Grade II listed and dates to the late 19th century. It is constructed of squared, coursed sandstone with 2-course weathered coping with roll-moulded top.

Plate 49: Church of St James, looking southeast (NHLE: 1138815)



Plate 50: East elevation to the Church of St James



Elton Conservation Area (A42)

- 4.4.30 The Site is located approximately 700m to the west of the Elton Conservation Area, which was designated in 1979 and amended in 1996, centred around Ince Lane. There is no conservation area appraisal available for this area.
- 4.4.31 Elton is mentioned in the Domesday book as part of the hundred of Ruloe, with a recorded population of 9 households in 1086. The name Elton derives from the Anglian word *ēl* meaning eel, and the old English *tūn* meaning a farmstead, enclosure, or village (AD Mills, 2003).
- 4.4.32 Listed buildings within the Conservation Area relate primarily to agricultural activity dating from the 17th through to 19th century (**Plate 53**), and contribute strongly to the rural character of Elton. The listed buildings are;
- Grade II listed 17th century 'Barn, now workshops' (**NHLE: 1115394, A38**);

- Grade II listed 17th century 'Cross Cottage' (NHLE: 1115418, A35, Plates 54, 55);
- Grade II* listed 17th century 'Rock Farmhouse' (NHLE: 1138369, A34);
- Grade II listed early 18th century 'Laurels Farmhouse' (NHLE: 1330218, A37);
- Grade II listed 20th century K6 Telephone Kiosk (NHLE: 1320225, A36); and,
- Grade II listed late 18th century 'Farmbuildings at Laurel Farm' (NHLE: 1320457, A39).

Plate 51: View looking east within the Elton Conservation Area



Plate 52: Cross cottage (NHLE: 1115418)



Plate 53: A view of Elton between 1970 and 1998, showing Cross Cottage (Cheshire Archives Ref: D 7215/39)



Rock Farmhouse (NHLE: 1138369, A34)

4.4.33 Rock Farmhouse is located on Ince Lane within the Elton Conservation Area, in an area primarily characterised by large farmhouses of 17th to 19th century date. Rock Farmhouse itself dates from the 17th century, and its list description is as follows:

“Farmhouse. Mid C17 possibly on earlier core and dated internally 1626. Little altered. Brick formerly limewashed, timber framed with brick nogging at rear. Slate roof, stone dressings and plinth.

Two storeys and cellars, lobby entrance, three windows at first floor, one is in cross wing. Front facade is now flush, with recess at ground floor whose rear wall may indicate original position of front wall. Three-light timber casements in rectangular openings below flush brick arches. Central ground floor window is recessed and has timber lintel below brick arch. Plain brick band at first floor rises over windows in cross wing and central bay. Door is recessed behind opening with flush quoins. Similar quoins at corners and at angle of recessed window bay. Replaced brick stacks are at rear of cross wing and on ridge behind entrance.

Interior: stop chamfered and ovolo moulded beams. Over cross-wing fireplace is moulded rectangular hood. Bressumer to main inglenook is stop chamfered and supported on outer pier with chamfered pedestal, panel decorated with alternating raised circles and lozenges in raised moulding. Cap bears inscription in raised lettering. 1626 T[HOMAS] H[ATTON]. Rear inglenook bressumer is stop chamfered.”

4.4.34 The farmhouse is constructed of red brick with a slate roof (**Plate 56** and **Plate 57**), in a form similar to others within Elton. The building is dated internally via an inscription that reads ‘1626 T[homas] H[atton]’. The size of the farmhouse suggests that the original owners of the farm were of some wealth.

Plate 54: Rock Farmhouse (NHLE: 1138369)



Plate 55: A view of Rock Farmhouse between 1970 and 1998 (Cheshire Archives Ref: D 7215/39)



Other Heritage Assets in Wider Vicinity of Site

- 4.4.35 Building 50 at Thornton Aero Engine Research Laboratory (**NHLE: 1392326; A10**), designated as a Grade II Listed Building and situated approximately 25m to the west of the Site. The building was constructed in 1940-1 as an aviation fuel research laboratory and offices. As a modern building located within the SMC complex the Proposed Development is unlikely to result in any adverse changes to the setting of this listed building, and there will be no impacts on this listed building. As such, this listed building has been scoped out of the Impact Assessment (See **Section 6**) below.
- 4.4.36 Other heritage assets located in the wider vicinity of the Site include the following:
- Church House Farmhouse Including Shippon Abutting on North (**NHLE: 1330240; Plate 5; A8**), approximately 330m to the south of the Site;
 - Barn to the northeast of Thornton Hall (**NHLE: 1130654; Plate 8; A5**), approximately 165m to the south of the Site;
 - Yew Tree House (**NHLE: 1130651; Plate 4; A2**), approximately 345m to the south of the Site;
 - Glebe Farmhouse (**NHLE: 1130652; Plate 6; A3**) approximately 235m to the south of the Site;
 - Grade II listed 'Lower Green Farmhouse with wall to front garden' (**NHLE: 1086967, A11**);
 - Park Cottages (**NHLE: 1130341, A12**);
 - Wood Farm Farmhouse (**NHLE: 1130342, A13**);
 - Barn at Wood Farm 100 metres south of farmhouse (**NHLE: 1130343, A14**);
 - Portion of boundary wall between the Square and entrance to the Manor House (**NHLE: 1130346, A15**);
 - Farm buildings abutting manor houses to southeast (**NHLE: 1138811, A17**);
 - Churchyard wall at Church of St James (**NHLE: 1138813, A18**);
 - Lamp post in churchyard by north gate (**NHLE: 1138814, A19**);
 - Coronation lamp post and lantern (**NHLE: 1138818, A21**);
 - Outbuilding attached to south end of Village Green Farm facing the square (**NHLE: 1138819, A22**);
 - Shippon at Lower Green Farm on east side of farmyard (**NHLE: 1138820, A23**);
 - K6 Telephone Kiosk (**NHLE: 1138824, A24**);

- Proffit's Lodge (NHLE: 1145881, A25);
- T-shaped shippon at Hall Farm 30 metres south of farmhouse (NHLE: 1318873, A26);
- Portion of boundary wall between junction of Kinsey's Lane with Pool Lane and Park Cottages (NHLE: 1318905, A27);
- Shippon on Wood Farm 30 metres south of farmhouse (NHLE: 1318909, A28);
- Stocks adjacent to Ince Manor House (NHLE: 1329994, A29);
- Yew Tree Farmhouse and attached shippon (NHLE: 1330393, A30);
- L-shaped shippon at Hall Farm 50 metres southwest of farmhouse (NHLE: 1330394, A31);
- 1, 2 and 3 The Square with attached front garden walls (NHLE: 1335894, A32);
- 7, 8 and 9, The Square' (NHLE: 1335917, A33);
- Barn, now workshops (NHLE: 1115394, A38);
- Cross Cottage (NHLE: 1115418, A35);
- Laurels Farmhouse (NHLE: 1330218, A37);
- K6 Telephone Kiosk (NHLE: 1320225, A36); and
- Farm buildings at Laurel Farm (NHLE: 1320457, A39).

4.4.37 The nature of the Proposed Development, in line with the wider industrial development of the SMC, combined with the separation between the heritage assets noted above and the Site, is such that there will be no impact on the settings of the assets identified. In this regard, those heritage assets in the wider vicinity (as shown in **Figure 1: Historic Environment Features map of Appendix B: Figures**) have been scoped out in the Impact Assessment (See **Section 6**) below.

5. Statement of Significance

5.1 Background

- 5.1.1 The following section assesses the heritage significance of the Thornton-le-Moors Conservation Area, the Ince Conservation Area, the Elton Conservation Area and the listed buildings within the conservation areas.
- 5.1.2 The significance assessment draws on the historical development included above and has been informed by a setting assessment of the conservation areas and the other designated heritage assets within them, which was carried out on 24 April 2024 and 20 May 2026. The assessment should also be read in conjunction with the description summaries in **Section 5** above.

Thornton-Le-Moors Conservation Area (A40)

- 5.1.3 The Thornton-le-Moors Conservation Area is considered to be of **high** heritage value as a designation containing a Grade I listed building and buildings that contribute significantly to its historic character. The significance of the asset is further assessed below.

Historic Value

- 5.1.4 The historic value is derived from its medieval origins as a rural village with a long ecclesiastical history. The Church was constructed in the 14th century, on the site of a pre-conquest church. The rest of the Grade II listed buildings within the Conservation Area represent the post-medieval development of the village, in relation to agricultural and domestic buildings.
- 5.1.5 There has been small-scale settlement within Thornton-le-Moors since at least the medieval period. This is demonstrated by its documentary mention in the Domesday Book, with five households at the settlement, and the placename meaning of ‘Thorn-tree Farm by the moor’.
- 5.1.6 The village is low scale in nature, with elevations at approximately 15m Above Ordnance Datum (AOD), which is in stark contrast to the prominent and dominating structures within the SMC. The SMC has been a part of the backdrop of Thornton-le-Moors since 1922, so the original rural setting of the village has been lost to the north. Its setting is now more intrinsically linked to the rural agricultural landscape to the east, south and west of the Conservation Area designation.

- 5.1.7 The SMC developed prior to the designation of the Conservation Area (in 1981), which would indicate that this is part of the designation's current setting. Furthermore, the Site benefits from natural screening between it and the Conservation Area.

Architectural Value

- 5.1.8 The Conservation Area is defined by its 17-19th century agricultural and domestic buildings, which are important and positive contributors to the character and appearance of the historic village. The dominant architectural style is red brick buildings, comprising a mixture of 1, 2 and 3 storeys, with slate roofs. The farmsteads demonstrate the retention of rural agricultural post-medieval buildings within the designation, which demonstrate the semi-rural character of this heritage asset within an industrial setting. Other notable buildings include:
- Church House Farmhouse Including Shippon Abutting on North (**NHLE: 1330240; Plate 5; A8**);
 - Thornton Hall (**NHLE: 1130653; Plate 7; A4**);
 - Barn to the northeast of Thornton Hall (**NHLE: 1130654; Plate 8; A5**);
 - Yew Tree House (**NHLE: 1130651; Plate 4; A2**); and
 - Glebe Farmhouse (**NHLE: 1130652; Plate 6; A3**).
- 5.1.9 The designation still retains much of its rural and agricultural character, with the village green a key central feature of the Conservation Area, as well as green spaces and agricultural fields in the northwestern and northeastern part of the designation (**Plates 10 to 16**).

Church of St Mary (NHLE: 1330242; A1)

- 5.1.10 The Church of St Mary is a 14th century Grade I listed building, which was designated in 1967 and has **high** heritage value. It is significant as the centre of ecclesiastical communities since the medieval period. The significance of this asset is further assessed below.

Historic Value

- 5.1.11 The Church holds historic value as a good surviving example of a 14th century ecclesiastical building, with a continuation in ecclesiastical use of the site from at least the time of the Domesday Book. There have been subsequent alterations and additions made to the building, particularly after the fire in 1909, since its construction, but the overall form and plan of the building, including the tower and nave, have remained largely unchanged. The main factors that give the asset its

historic value is its age, and its use as a focal point of ecclesiastical worship since the early medieval period.

- 5.1.12 The setting of the Church includes its location adjacent to Thornton Green Lane, on the western side of the Churchyard. Its retaining wall (**A6**) also contributes to its setting. The Church sits on raised ground from road level and the remainder of the village and is a prominent building within the village. Extensive tree screening ensures that the Church is not visible from all parts of the designation, given its location in the western half of the Conservation Area. Within the setting of the Church are a range of 17-19th century agricultural and domestic buildings that, although they do not have intervisibility with the Church, would have formed the historic core of the village and serve as a reminder of the development of the landscape through the post-medieval period.
- 5.1.13 Due to the construction of the SMC and tree screening, the heritage asset is not dominant or prominent within the wider landscape beyond the Conservation Area designation.

Architectural Value

- 5.1.14 The Church has architectural value, with its red Cheshire sandstone being distinctive. Although there have been additions and alterations to the Church building since its original construction, the plan and form of the Church, including the tower and nave, survive. There are also internal features that contribute to the architectural value of the building, including a rare example of an altar rail that surrounds the altar on three sides, and a piscina, which is an old style of font that is now embedded into the south wall of the Church.

Communal Value

- 5.1.15 The Church is the only one situated within the village of Thornton-le-Moors and originally would have served Thornton-le-Moors, Elton, Dunham Hill, Hapsford and Wimbold's Trafford until the 19th century. Although currently temporarily closed for conservation remedial works (at the time of writing), the Church still operates as a place of worship for the local community and as a place of public gathering and communal worship.

Retaining wall bounding churchyard of the Church of St Mary on west, south and half on east side including gate piers at southwest corner (NHLE: 1130655; A6)

Historic and Architectural Value

- 5.1.16 The retaining wall bounds the Church of St Mary (**A1**) on all sides and has architectural and historic value as a part of the development of the Churchyard

during the 18th and 19th centuries. It is constructed of square coursed rubble in different sections of wall, and the listing also includes the gate piers. It encloses the consecrated grounds to the Church, with the Church being the focal point within the Churchyard. and the adjacent roads to the walls contributing to the setting of the asset.

5.1.17 This is a Grade II listed building of **medium** heritage value.

Table Tomb to John Davies of Dunham, southeast of Church of St Mary (NHLE: 1145887; A7)

Historic and Architectural Value

5.1.18 The table tomb has architectural and historic value as a funerary monument dating to 1725 by John Davies of Dunham. It is constructed of sandstone and has an intricate relief on it incorporating a dove. Although not much is known about the individual buried here, he was likely a prominent figure in the village during the 18th century, given the nature of this monument. Its setting is characterised by its relationship to the Church of St Mary (A1), and the Churchyard.

5.1.19 This is a Grade II listed building of **medium** heritage value.

Church Farmhouse including Cottage wing to West (NHLE: 1330241; A9)

Historic and Architectural Value

5.1.20 This Grade II listed building was constructed between the later 18th and 19th centuries and is faced in rendered brick with a slate roof. It comprises 3 storeys, including a 2-storey cottage wing in a L-shaped plan, which would indicate that a wealthier family lived here during the post-medieval period. The farmhouse was part of a continuing agricultural landscape, with the owners of the property still working on the agricultural lands until at least the end of the 1990s. The setting of the heritage asset comprises the rural agricultural fields that adjoin the village, which the house would have historically served.

5.1.21 This is a Grade II listed building of **medium** heritage value,

Ince Conservation Area (A41)

5.1.22 The Ince Conservation Area is considered to be of **high** value as a designation containing a scheduled monument, Grade I and Grade II* listed buildings and buildings that contribute positively to its historic character. The significance of the asset is further assessed below.

Historic Value

- 5.1.23 The historic value of Ince is derived from its origins in the early medieval period as the site of a monastic manor, and its continued development through the medieval period is evidenced by the 14th century chancel of the Church of St James. Development through the post-medieval period is also evidenced by alterations to the Church of St James, as well as the numerous agricultural and domestic buildings within Ince that date from the 17th century onwards.
- 5.1.24 The village is centred around Ince Village Square which the Ince Manor Monastic Grange sits adjacent to. The village is low scale in nature, with most buildings being on 2 storeys or less in height. The southern part of the designation is dominated by woodland that restricts views south out of the village towards the SMC. There are some longer reaching views from Kinseys Lane looking southwest towards the SMC, but these do not intrude on the rural character of the area and screening from trees along the edge of the SMC means that only the chimney stacks are visible. The restricted views south also mean that the setting of the village is more closely linked to internal views within the settlement.
- 5.1.25 The SMC developed prior to the designation of the Conservation Area (in 1969), which would indicate that this is part of the designation's historic setting.

Architectural Value

- 5.1.26 The Conservation area is characterised by both surviving medieval structures, particularly associated with Ince Manor, as well as the 17th to 19th century agricultural and domestic buildings, which are important and positive contributors to the character and appearance of the village. The dominant material used is red coursed sandstone, with later buildings using brick of a similar appearance, such that there is a homogenous feeling to the overall architectural style of the village. The Old Hall and lodgings at Ince Manor demonstrate medieval architectural features including those constructed for defence, highlighting the importance of this manor during the medieval period. The historic agricultural buildings within the designation demonstrate the semi-rural character of the Ince Conservation Area.
- 5.1.27 The Ince Conservation Area retains much of its semi-rural and agricultural character, centred around Ince Manor, as well as the Church of St James to the south which sits amongst green space that acts as a separation between the centre of the village and the SMC to the south.

Manor House of Abbey of St Werburgh Chester, Including Old Hall and Monastery Cottages (NHLE: 1138810, A16)

- 5.1.28 The Manor House of Abbey of St Werburgh Chester (including the Old Hall and Monastery Cottages) is an early medieval Grade I listed building, designated in

1963 and of **high** heritage value. It is significant as a surviving example of one of the earliest monastic granges known to belong to the Abbey of St Werburgh, Chester. The significance of this asset is further assessed below.

Historic Value

- 5.1.29 The asset holds historic value as a surviving example of a benedictine manor with its origins in the early medieval period. Subsequent alterations and additions to the asset demonstrate that it has been in continued use throughout the medieval period, and was worthy of investment and protection. The manor would have extended its influence over the surrounding countryside, and been a focal point in the historic landscape. The asset also contains the potential to inform on the understanding of key events in the late medieval period, including the dissolution and reformation of the monasteries.
- 5.1.30 The asset is located adjacent to the Ince Village Square within the scheduled area of the Ince Monastic Grange, and its setting encompasses these features. Neighbouring listed buildings including the 'Farm buildings abutting manor houses to southeast' (NHLE: 1138811) also contribute to its setting. The primary long reaching views from the asset are to the northeast along Marsh Lane looking towards the river Mersey. Views south are restricted by intervening domestic buildings and screening from trees.
- 5.1.31 Due to the screening from trees and woodland and surrounding buildings the heritage asset is not dominant or prominent within the wider landscape beyond the Ince Conservation Area designation.

Architectural Value

- 5.1.32 The asset demonstrates architectural value through its surviving medieval features as well as later additions. The earliest surviving features demonstrate early medieval architectural styles, and additions made during the late 14th century, including arrow-slits, loopholes and arches that provide evidence for how monastic granges were defended. These features also demonstrate prevailing architectural and artistic styles of the period. Redundant architectural features such as the second storey doors on the lodgings, provide evidence for how the asset may have originally appeared and how its use changed over time.

Church of St James (NHLE: 1138815, A20)

- 5.1.33 The Church of St James is a Grade II* listed building of 14th century origins, which was designated in 1963 and has **high** heritage value. It is significant as a centre of ecclesiastical communities since the medieval period. The significance of this asset is further assessed below.

Historic value

- 5.1.34 The Church holds historic value as a surviving example of a church that has been in use since the 14th century and continued in use through the post-medieval period. The chancel dates to the 14th century and contains important features including the three-light window, 15th century two-light windows and arched brace roofs that date to 1671. The building was rebuilt in 1854, and this form survives to the present. The main contributing factors towards the assets historic value are its age, and its use as a focal point for ecclesiastical worship since the medieval period.
- 5.1.35 The setting of the Church feels contained to the Churchyard in which it sits, with a screen of trees contributing towards a secluded and tranquil atmosphere around the Church. Long reaching views are only afforded to the east, away from the SMC, where there are glimpsed views over trees and roofs towards the more distant landscape. There are also glimpsed views through the screen of trees north towards 17th and 19th century buildings within the Ince Conservation Area, that contribute towards the rural character of the Church. The Churchyard wall also contributes to its setting (**NHLE: 1138815**).
- 5.1.36 Due to natural screening, the heritage asset is not dominant or prominent within the wider landscape beyond the Conservation Area designation.

Architectural Value

- 5.1.37 The Church has architectural value, being constructed of coursed sandstone blocks in a style used throughout the Ince Conservation Area. Though the Church was rebuilt in the 19th century, elements of the original tower and chancel survive, including internal features such as the arched brace roof.

Communal value

- 5.1.38 The Church is the only one situated within Ince and serves as a place of worship for the local community and as a place of public gathering and communal worship.

Elton Conservation Area (A42)

- 5.1.39 The Elton Conservation Area is considered to be of **high** heritage value as a conservation area containing a Grade II* listed building and buildings that contribute significantly to its historic character. The significance of the asset is further assessed below.

Historic Value

- 5.1.40 The Conservation Area has historic value attributed to its origins in the early medieval period, being mentioned in the Domesday book of 1086. The designation

sits in the centre of the modern village of Elton, which now extends far beyond its historic core. The buildings within the designation are low in scale, with the majority of buildings comprising 2 storeys or less. The setting of the designation feels restricted to the area along Ince Lane, with the historic core being disconnected from the surrounding agricultural landscape by more modern development. Views to the west are blocked by intervening modern buildings on the west side of Elton, such that from most locations within the Conservation Area views of the SMC are impeded, and where there is intervisibility these are only partial views of the tops of chimney stacks.

Architectural Value

- 5.1.41 The architectural value of the designation is derived from the surviving 17th to 19th century farm and domestic buildings which sit alongside Ince Lane. These buildings are important and positive contributors to the character and appearance of the designation, all being constructed of red brick or sandstone, giving the Conservation Area an homogenous appearance. The designation retains much of its semi-rural and agricultural character, with some fields retained to the rear of Cross Cottage (**NHLE: 1115418**), but for the most part the surrounding agricultural landscape now feels distant from the designation.

Rock Farmhouse (NHLE: 1138369, A34)

- 5.1.42 Rock Farmhouse is a 17th century Grade II* listed building, which was designated in 1967 and is of **high** heritage value. It is significant as a surviving example of an early 17th century high-status farmhouse. The significance is further assessed below.

Historic and Architectural value

- 5.1.43 The size of the farmhouse suggests that it was owned by a wealthy family during the post-medieval period, and demonstrates the growth of Elton during this period. The architectural value of the farmhouse is demonstrated through its construction in red brick with a slate roof, with elements of the farmhouse still surviving from the 17th century. The farmhouse would have been part of a wider agricultural landscape, though this connection now appears to have been severed by more modern development to the north of the farmhouse, such that the setting of the asset now feels closely tied to Ince Lane and other farmhouses within the Conservation Area.

6. Proposed Development and Potential Impacts on Heritage Assets

6.1 The Proposed Development

- 6.1.1 The Proposed Development is located within the southern part of the SMC. The Proposed Development would be positioned adjacent to the existing CHP facility and occupies a plot size of approximately 67.32ha, the majority of which falls within the SMC.
- 6.1.2 The Proposed Development will consist of the construction and operation of five hydrogen ready gas turbine modules (producing up to a constant output of 100MW in total), and Heat Recovery Steam Generators (HRSG). The Proposed Development also includes the construction of a permanent access road to facilitate Abnormal Indivisible Loads (AILs) during construction, as well as additional pipes on existing gantries (to reach tie-ins across the SMC). A full description of the Proposed Development is provided in Volume 1, Chapter 2 of the Scoping Report.

6.2 Potential Impacts on Designated Heritage Assets

Thornton-le-Moors Conservation Area (A40)

- 6.2.1 This heritage asset is located approximately 20m to the south of the Site. The Proposed Development will add new infrastructure elements within the setting of the Thornton-le-Moors Conservation Area designation. The preliminary parameters show the height of the new heat recovery steam generator stacks will be 80m. There will be temporary and permanent lighting installations within the Site, a Temporary Construction Compound, and increased construction traffic during the construction phase within the Site.
- 6.2.2 The SMC is currently a part of the setting of the Thornton-le-Moors Conservation Area, with chimneys from the SMC being prominent in views across the designation (**Plates 33 to 37**). Any additions within the Site will contribute to this industrial character to the north of the Conservation Area, with the new structures ensuring a more sustainable future for the industrial works within SMC. Furthermore, the primary significance of the Conservation area lies in its rural and

agricultural setting to the south, west and east of the asset, and development within the Site will not affect this.

- 6.2.3 Should the structures in the Site be visible from the Conservation Area, this does not necessarily constitute adverse harm to the significance of the heritage asset. It is noted that the designation of the CA occurred sixty years after the initial construction phase of the SMC. There is also natural screening in places between the designation and the Site. Changes in traffic movements will not result in an adverse impact on the Conservation Area, given that the northern boundary of the designation is an A-road so traffic is fast flowing across this boundary already. Therefore, the new temporary access road running from the eastern part of the Site to the A5117 will cause **Minimal Neutral** impact to the setting of the heritage asset, particularly as this will be within an area that is already hardstanding.
- 6.2.4 Where there may be some intervisibility between the Conservation Area and the new elements within the Site there will **Minimal Neutral** impact to the setting of the heritage asset. The new structures would be in keeping with the industrial character to the north of the heritage asset, creating a more sustainable industrial plant. Where there is additional natural screening this may reduce the level of harm to a **Negligible Neutral** impact on the setting of the heritage asset.
- 6.2.5 Overall, the Proposed Development would result in a **Minimal Neutral** impact on the significance and setting of the heritage asset.

Plate 56: The SMC taken from the junction of Niddries Lane with the A5117, which is the northernmost point of the Thornton-le-Moors Conservation Area, facing northeast



Plate 57: The SMC taken from near the junction of Niddries Lane with the A5117, which is the northernmost point of the Thornton-le-Moors Conservation Area, facing northwest (WSP, 2024).



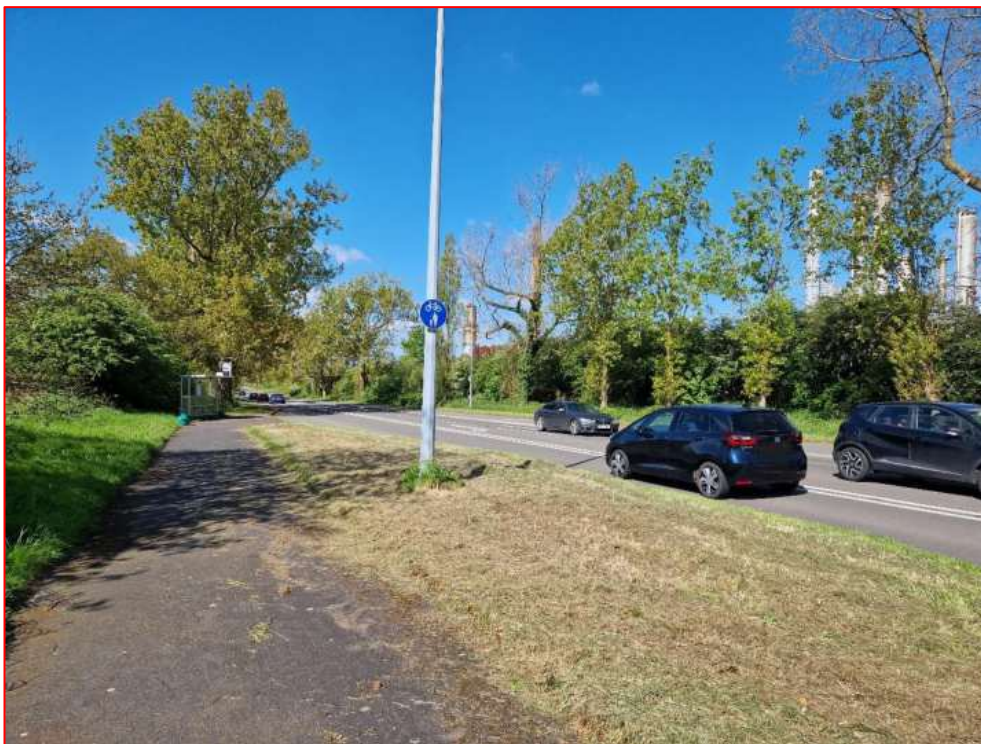
Plate 58: The SMC taken from near the junction of Poole Lane with the A5117, which is the northernmost point of the Thornton-le-Moors Conservation Area, facing northwest



Plate 59: View of the western part of the SMC from Thornton Green Lane in Thornton-le-Moors Conservation Area, facing northwest



Plate 60: View from the junction of A5117 with Thornton Green Lane in the Thornton-le-Moors Conservation Area, facing northwest



Church of St Mary (NHLE: 1330242; A1)

- 6.2.6 The Church of St Mary is located to the south of the Site, with some intervisibility between the heritage asset and the SMC (which includes the Site). It is located on the western side of the Conservation Area, on the junction of Niddries Lane and Thornton Green Lane. Its principal elevation faces south, fronting the village of Thornton-le-Moors and away from the SMC and the Proposed Development. It sits on a slightly elevated position within the village. The tower is not visible from all points in the designation, due to natural tree screening and intervening buildings.
- 6.2.7 The SMC is currently a notable part of the setting of the Church of St Mary, with chimneys from the SMC being prominent in views from the Church. Any additions within the will contribute to this industrial character to the north, creating a sustainable infrastructure element to the SMC.
- 6.2.8 With the above in mind, where the new structures are visible in backdrop views of the heritage asset, this will not constitute harm to its significance and setting. In this regard, the Proposed Development will at most result in a **Minimal Neutral impact** to the setting of the heritage asset. Note that there is also natural screening between the Church and the Site, which historically hasn't been the case (see **Plates 40 and 41**).
- 6.2.9 Overall, the Proposed Development would result in **Minimal Neutral** impact on the significance and setting of the heritage asset.

Plate 61: View looking north towards the Church of St Mary, with SMC structures in the background



Retaining wall bounding churchyard of the Church of St Mary on west, south and half on east side including gate piers at southwest corner (NHLE: 1130655; A6)

- 6.2.10 The retaining walls bound all four sides of the Church of St Mary (**A1**) churchyard, with the relationship of the heritage asset to the Church being the primary characteristic of its setting.
- 6.2.11 The SMC is currently a significant part of the wider landscape of the retaining wall, with chimneys from the SMC being prominent in views from the western, northern and eastern sides of the heritage asset, in particular. Any additions within the Site will contribute to this industrial character to the north, adding a sustainable element to the SMC.
- 6.2.12 With the above in mind, where the new structures share intervisibility with the heritage asset, this does not necessarily constitute harm to the significance of the heritage asset particularly as there would have been development within the SMC since 1922 and the walls were designated in 1982. There is also some level of natural screening between the heritage asset and the Site, which historically hasn't been the case (see **Plates 40 and 41**).
- 6.2.13 Overall, the Proposed Development will result in **Minimal Neutral impact** to the significance of the asset.

Table Tomb to John Davies of Dunham, southeast of the Church of St Mary (NHLE: 1145887; A7)

- 6.2.14 The table tomb is located on the southeast side of the Church of St Mary. Due to intervening vegetation and buildings, there is no intervisibility between the heritage asset and the Site. The Proposed Development will result in a **Negligible Neutral** impact on the setting of the heritage asset, given that the heritage asset's setting is characterised by the Church of St Mary and the surrounding churchyard.

Church Farmhouse including Cottage wing to West (NHLE: 1330241; A9)

- 6.2.15 The Church Farmhouse is situated on the northern boundary of the Thornton-Le-Moors Conservation Area (**A11**), which would have been a domestic property for a wealthy occupant constructed during the later post-medieval period. Its principal elevation faces south, looking inwardly into the Conservation Area, in a L-shaped plan.
- 6.2.16 The SMC is currently a significant part of the setting of the heritage asset, with chimneys from the SMC being prominent in views from the Church Farmhouse. Any additions within the Site will contribute to this industrial character to the north, creating a sustainable infrastructure element to the SMC. Furthermore, the primary significance of the asset lies in its rural and agricultural use during the post-

medieval period, and this setting is still evident to the south and southeast of the asset.

- 6.2.17 The Proposed Development will at most result in a **Minimal Neutral** impact to the setting of the heritage asset. Changes in traffic movements would not result in an adverse impact on the Conservation Area, given that the northern boundary of the designation is an A-road so traffic is fast flowing across this boundary already.

Plate 62: Church Farmhouse with SMC structures visible in background



Ince Conservation Area (A41)

- 6.2.18 The Ince Conservation Area is located approximately 10m to the north of the Site. The Proposed Development will add new infrastructure elements into the southern part of the SMC, approximately 1km from the Ince Conservation Area. The SMC is screened from the Conservation Area designation by woodland and screens of trees, such that for the most part the presence of the SMC is not evident in views from within the designation. Where views are afforded to the SMC the taller infrastructure elements situated in the southern part of the SMC are only evident in distant views, and do not intrude upon the setting of the Conservation Area.
- 6.2.19 Views of new infrastructure elements, primarily the HRSG stacks, would only be evident from parts of the Conservation Area, and would not constitute harm to its significance and setting. The Proposed Development would at most result in a **Minimal Neutral** impact to the setting and significance of the designation.

Plate 63: View looking southwest along Pool Lane, with the Church of St James visible in the left of the picture. Views of the SMC are screened from view.



Plate 64: View from Kinsey's Lane on the northern edge of the Conservation Area. There are some distant views of SMC structures though these are heavily screened by trees.



Manor House of Abbey of St Werburgh Chester, Including Old Hall and Monastery Cottages (NHLE: 1138810, A16)

6.2.20 The heritage asset is located approximately 500m to the north of the Site. The Proposed Development will add new infrastructure elements into the south part of the SMC, which would be approximately 1.5km from this heritage asset. Due to intervening buildings and natural screening of trees, there is no intervisibility between the asset and the SMC and as such the Proposed Development would not constitute harm to its significance and setting. The Proposed Development would result in a **Negligible Neutral** impact on the setting of the heritage asset, as the setting of the asset is defined by its immediate surroundings within Ince Conservation Area.

Church of St James (NHLE: 1138815, A20)

6.2.21 The heritage asset is located approximately 300m to the north of the Site. The Proposed Development will add new infrastructure elements into the southern part of the SMC, which would be approximately 1.3km from this heritage asset. Due to woodland and trees that mark the boundary of the Churchyard there is no intervisibility between the asset and the SMC and as such the Proposed Development would not constitute harm to its significance and setting. The Proposed Development will result in a **Negligible Neutral** impact on the setting of the heritage asset, as the setting of the asset is defined by its immediate surroundings within the Ince Conservation Area.

Plate 65: View looking southwest from within the Churchyard of Church of St James, showing screening from trees



Elton Conservation Area (A42)

6.2.22 The Elton Conservation Area is located approximately 640m to the east of the Site. The new infrastructure elements located in the southern part of the SMC would be approximately 1.5km to the west of the designation. Visibility of the SMC from within the Conservation Area is restricted due to intervening modern buildings on the west side of Elton, which restrict longer reaching views. Only the tops of some of the chimney structures are visible above roofs within Elton, from certain locations within the Conservation Area. Where the new structures are visible from the designation, this would not constitute harm to the significance of the asset, as the setting of the asset is defined by internal views contained by modern development around the Conservation Area. In this regard, the Proposed Development will result in a **Negligible Neutral** impact on the setting of the heritage asset, as the setting of the asset is defined by its immediate surroundings within Elton.

Plate 66: View looking southwest from the edge of the Elton Conservation Area. A chimney is just visible above the roof of a residence (red arrow shows location of chimney).



Rock Farmhouse (NHLE: 1138369, A34)

6.2.23 Rock Farmhouse is located approximately 770m to the east of the Site. The new infrastructure elements located in the southern part of the SMC would be approximately 1.6km to the west of the heritage asset. There is no intervisibility between the SMC and the heritage asset due to intervening buildings within the Elton Conservation Area and modern buildings on the west side of Elton, which restrict longer reaching views. The Proposed Development would result in a **Negligible Neutral** impact on the setting of the heritage asset, as the setting of the asset is defined by its immediate surroundings within Elton.

7. Conclusions

7.1 Summary

- 7.1.1 This Heritage Statement has been undertaken following the principles set out in the NPPF and in line with relevant local policy, national guidance and best practice. It has assessed the potential impacts of the Proposed Development on a number of heritage assets, including the Thornton-le-Moors Conservation Area, the Elton Conservation Area, the Ince Conservation Area and the listed buildings in the vicinity.

Thornton-le-Moors Conservation Area (A11)

- 7.1.2 While there will be some new infrastructure elements added within the Site, these are unlikely to be visually prominent from the Conservation Area designation, given the existing natural screening and intervening development between the designation and the Site. New elements within the Site that are visible from the wider environment will be evident as part of the industrial landscape to the north of the Thornton-le-Moors Conservation Area. Structures visible from the designation will not constitute harm to the significance and setting of the heritage asset, given that the Conservation Area was designated sixty years after the early phase of the SMC (of which the Site forms a part) was constructed. With this in mind, it is likely that the Proposed Development will at most result in a **Minimal Neutral** impact to setting of the conservation area.

Church of St Mary (NHLE: 1330242; A1)

- 7.1.3 While there will be some new infrastructure elements constructed within the Site, these are unlikely to be visible from the Church of St Mary. The existing natural screening and intervening development between the Site and the heritage asset are likely to largely screen these new elements. If the new elements within the Site are visible, these will be evident in the context of the industrial landscape to the north of the heritage asset. Where the new structures are visible in the context of the heritage asset, this will not constitute harm to its significance and setting. With this in mind, the Proposed Development will at most result in a **Minimal Neutral** impact to the setting of the heritage asset.

Retaining wall bounding churchyard of the Church of St Mary on west, south and half on east side including gate piers at southwest corner (NHLE: 1130655; A6)

- 7.1.4 While there will be some new infrastructure elements added within the Site, these are unlikely to be visible in the context of the heritage asset, given the existing natural screening and intervening development between the Site and the heritage asset. The new elements within the Site will be evident in the context of the industrial landscape to the north of the heritage asset. Where the new structures are visible in the context of the heritage asset, this will not constitute harm to its significance and setting. With this in mind, the Proposed Development will at most result in a **Minimal Neutral** impact to the setting of the heritage asset.

Table Tomb to John Davies of Dunham, southeast of Church of St Mary (NHLE: 1145887; A7)

- 7.1.5 Due to the intervening natural screening and buildings, development within the Site will not be visible in the context of the heritage asset. Furthermore, the setting of the asset does not include the SMC. Therefore, development within the Site will result in a **Negligible Neutral** impact on the setting of the asset.

Church Farmhouse including Cottage wing to West (NHLE: 1330241; A9)

- 7.1.6 While there will be some new infrastructure elements added within the Site, these are unlikely to be visible in the context of the heritage asset, given the existing natural screening and intervening development between the Site and the heritage asset. The new elements within the Site will be evident in the context of the industrial landscape to the north of the heritage asset. Where the new structures are visible in the context of the heritage asset, this will not constitute harm to its significance and setting. With this in mind, the Proposed Development will at most result in a **Minimal Neutral** impact on the setting of the heritage asset.

Ince Conservation Area

- 7.1.7 New infrastructure elements added within the Site will largely be screened from views within the Ince Conservation Area by woodland and trees on the edge of the designation. Those that may be visible would be located in the southern part of the SMC approximately 1km from the Conservation Area, and would not intrude on the setting of the designation. In this regard, the Proposed Development would not constitute harm to its significance and setting and will at most result in a **Minimal Neutral** impact on the setting of the heritage asset.

Manor House of Abbey of St Werburgh Chester, Including Old Hall and Monastery Cottages (NHLE: 1138810)

- 7.1.8 New infrastructure elements added within the Site will be screened from views from the asset by intervening buildings, and trees on the edge of the Ince

Conservation Area. The SMC is also not considered to form part of the setting of the heritage asset. As such, the Proposed Development would not constitute harm to the significance and setting of the heritage asset. With this in mind, the Proposed Development will at most result in a **Negligible Neutral** impact on the setting of the heritage asset.

Church of St James (NHLE: 1138815)

- 7.1.9 New infrastructure elements added within the Site would be screened from views from the heritage asset by woodland to the south and trees along the edge of the Churchyard. The SMC is also not considered to form part of the setting of the heritage asset. As such, the Proposed Development would not constitute harm to the significance and setting of the heritage asset. With this in mind, the Proposed Development will at most result in a **Negligible Neutral** impact on the setting of the heritage asset.

Elton Conservation Area

- 7.1.10 While there may be some views of new infrastructure elements constructed within the Site, these would for the most part be restricted from within the Elton Conservation Area, and partly screened by intervening buildings. The SMC is also not considered to form part of the setting of the designation, and would not intrude upon its setting. As such, the Proposed Development would not constitute harm to the significance and setting of the Conservation Area. With this in mind, the Proposed Development will at most result in a **Negligible Neutral** impact on the setting of the heritage asset.

Rock Farmhouse (NHLE: 1138369)

- 7.1.11 New infrastructure elements added within the Site would be screened from views from the heritage asset by intervening buildings within Elton. The SMC is also not considered to form part of the setting of this heritage asset. As such, the Proposed Development would not constitute harm to its significance and setting. With this in mind, the Proposed Development will at most result in a **Negligible Neutral** impact on the setting of the heritage asset.

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Appendices



Appendix A – Historic Environmental Gazetteer

The table below represents a gazetteer of known historic environment Sites and finds within the Study Area. Each entry has an assessment (A) reference number. The gazetteer should be read in conjunction with the historic environment features map.

Abbreviations:

- HER: Historic Environment Record.
- NHL: National Heritage List.

Assess. (A) ref	NGR	Site Name	Description	Period	HER/NHL Ref.
A1	SJ4415774550	Church of St Mary	A Grade I listed 14th century church probably on the Site of a pre-Conquest church. A south porch was added in the 17th Century with further additions to the Church made throughout the 17th century. Fragments of a 10th century cross shaft with figures and animal carvings from trench round the Church.	14th century	1330242
A2	SJ4431874445	Yew Tree House	A Grade II listed house from the early 18th century which has been altered.	18th century	1130651
A3	SJ4424174540	Glebe Farmhouse	Early 18th century Grade II Listed farmhouse. Brown brick, slate roofs, 2 storeys with gable attics. Four unequally spaced camber-headed casement windows.	18th century	1130652
A4	SJ4427074583	Thornton Hall	A Grade II listed 17th century farmhouse which was remodelled in the 18th century with an early 19th century wing at the rear. Originally door of 6 panels altered to four, part glazed, below 2nd window. Added trellised porch.	17th century	1130653

Assess. (A) ref	NGR	Site Name	Description	Period	HER/NHL Ref.
A5	SJ4429474627	Barn to North East of Thornton Hall	A Grade II listed barn of either late 17th century or early 18th century which was then altered to include shippens.	17th century	1130654
A6	SJ4415874523	Retaining Wall Bounding Churchyard of St Marys Church on West, South and half on East Side including Gate Piers at South West Corner	Grade II listed walls and gatepiers dating between the 18th and 19th century. West of the north aisle of the Church incorporates the walls of late 19th century basement heating chamber of the Church. South part of the wall on eastern side is probably c1858.	18th and 19th century	1130655
A7	SJ4417774543	Table Tomb to John Davis of Durham, South East of Church of St Mary	Grade II listed funerary monument with a sandstone base has 2 sunk panels parts buried. Tablet top had inscription between fluted columns in shallow relief each on raised and fielded panels pedestals and supporting round arch below is a symbolic dove.	18th century	1145887
A8	SJ4428874446	Church House Farmhouse including Shippon Abutting on North	Grade II listed Farmhouse and shippon of late 18th or early 19th century. 1st floor has been added, probably of 20th century. Range is listed as largely unaltered example of its type.	18th century	1330240
A9	SJ4418674651	Church Farmhouse including Cottage Wing to the West	A Grade II listed probably later 18th century or possibly early 18th century which was remodelled c1850. Rendered brick, slate roof, stone plinth and dressing. 3 storeys with 2 storey cottage wing with an L shaped plan.	18th century	1330241

Assess. (A) ref	NGR	Site Name	Description	Period	HER/NHL Ref.
A10	SJ4492575674	Building 50 at Thornton Aero Engine Research Laboratory	A Grade II listed aviation fuel research laboratory and offices, dating between 1940-1, and constructed by Sir Alan Copham and Burnet, Tait and Lorne.	20th century	1012122
A11	SJ4507176410	Lower green farmhouse with wall to front garden	A Grade II listed early 19th century late Georgian farmhouse. Two storey with Flemish bond brickwork and Welsh slate roof.	19th century	1086967
A12	SJ4493276486	Park cottages	A Grade II listed two storey two window cottages. Probably early 19th century conversion of earlier farm building. Local sandstone with Welsh slate roof.	19th century	1130341
A13	SJ4471176859	Wood farm farmhouse	A Grade II listed 17th century L-shaped farmhouse. Brown brick with sections of local squared sandstone and corrugated iron roof.	17th century	1130342
A14	SJ4470176819	Barn at wood farm 100 metres south of farmhouse	A Grade II listed early 19th century barn around 100m south of farmhouse. Constructed of squared coursed rubble with Welsh slate roof.	19th century	1130343
A15	SJ4500776488	Portion of boundary wall between the square and entrance to the manor house	A Grade II listed boundary wall located between the Manor House and the square, probably of medieval date.	Medieval	1130346
A16	SJ4494576550	Manor house of abbey of St Werburgh	Grade I listed remains of Manor House of St Werburgh Chester. Comprising the Old Hall and Monastery	13th century	1138810

Assess. (A) ref	NGR	Site Name	Description	Period	HER/NHL Ref.
		Chester, including old hall and monastery cottages	Cottages. Showing at least five phases of masonry from the 13th century onwards.		
A17	SJ4496976541	Farm buildings abutting manor houses to south east	A Grade II listed two storey farm building with gabled slate roof of early 19th century date. Constructed of brown brick.	19th century	1138811
A18	SJ4495476360	Churchyard wall at st James' church	Grade II listed churchyard wall at St James Church. Defines the boundary of the Churchyard, constructed of coursed sandstone blocks.	19th century	1138813
A19	SJ4497376386	Lamp post in churchyard by north gate	Grade II listed late 19th century lamp post located in the Churchyard of Church of St James.	19th century	1138814
A20	SJ4498676352	Church of st James	A Grade II* listed church with chancel dating to the 14th century and tower dating to 15th century. Largely rebuilt in 1854 by Edward Hodkinson in perpendicular style.	14th-19th century	1138815
A21	SJ4502076447	Coronation lamp post and lantern	A Grade II listed Coronation lam post and lantern dated to 1902. Carries an ornate cast iron plaque 'ERECTED BY THE INHABITANTS OF INCE AND NEIGHBOURHOOD IN COMMEMORATION OF THE CORONATION OF KING EDWARD VII JUNE 23 1902'	20th century	1138818
A22	SJ4504876434	Outbuilding attached to south end of village green farm facing the square	A Grade II listed outbuilding of 17th century date. Attached to south end of Village Green Farm facing the square. Constructed of squared rubble of local sandstone.	17th century	1138819

Assess. (A) ref	NGR	Site Name	Description	Period	HER/NHL Ref.
A23	SJ4510376400	Shippon at lower green farm on east side of farmyard	A Grade II listed Shippon at Lower Green Farm. Early 19th century constructed of squared coursed rubble local sandstone to first floor and brown brick above.	19th century	1138820
A24	SJ4499976445	K6 telephone kiosk	A grade II listed K6 telephone kiosk, designed 1935 by Sir Giles Gilbert Scott.	20th century	1138824
A25	SJ4499876753	Proffit's lodge	A Grade II listed early 19th century single storey sandstone cottage. May have been built as a toll cottage on route to Ferry Head.	19th century	1145881
A26	SJ4476976931	T-shaped shippon at hall farm 30 metres south of farmhouse	A Grade II listed early 17th century T-shaped shippon. Located at Hall Farm, constructed of squared coursed local sandstone rubble with Welsh slate roof.	17th century	1318873
A27	SJ4495876450	Portion of boundary wall between junction of kinsey's lane with pool lane and park cottages	A Grade II listed portion of boundary wall of form Monastic Grange, likely medieval.	Medieval	1318905
A28	SJ4469976841	Shippon on wood farm 30 metres south of farmhouse	A Grade II listed Shippon located at Wood Farm. 17th century, constructed of brown brick with section of local coursed squared sandstone. Thatched roof covered with corrugated iron.	17th century	1318909
A29	SJ4498276529	Stocks adjacent to Ince manor house	Grade II listed stocks adjacent to Ince Manor House. No timberwork survives, a pair of vertical stones embedded in ground, grooved on inner faces to receive timber stocks.	Medieval	1329994

Assess. (A) ref	NGR	Site Name	Description	Period	HER/NHL Ref.
A30	SJ4478476554	Yew tree farmhouse and attached shippon	A Grade II listed Shippon of 17th century date. Constructed of brown brick with sandstone sections, Welsh slate roof.	17th century	1330393
A31	SJ4475176919	L-shaped shippon at hall farm 50 metres south west of farmhouse	A Grade II listed Shippon at Hall Farm. 19th century, constructed of brown brick with sections of local sandstone squared coursed rubble walls. Welsh slate roof.	19th century	1330394
A32	SJ4503976462	1, 2 and 3 with attached front garden walls	Grade II listed late Georgian symmetrical 5-bay two storey terrace. Early 19th century, built as hotel for Mersey ferry passengers and later converted to house.	19th century	1335894
A33	SJ4499376454	7, 8 and 9, the square	Grade II listed terrace of three cottages, originally with symmetrical 4-window front. Early 19th century, altered in the late 19th century to form village shop and post office.	19th century	1335917
A34	SJ4583375561	Rock Farmhouse	A Grade II* listed farmhouse of mid 17th century date. Dated internally to 1626, constructed of brick, formerly limewashed and slate roof.	17th century	1138369
A35	SJ4576675607	Cross cottage	A Grade II listed cottage of 17th century date. Two storeys, constructed of red sandstone.	17th century	1115418
A36	SJ4577575573	K6 telephone kiosk	A Grade II listed type K6 telephone kiosk. 1936 designed by Sir Giles Gilbert Scott.	20th century	1320225
A37	SJ4580375549	Laurels farmhouse	A Grade II listed farmhouse dated to 1705. Constructed of brown brick with slate roof.	18th century	1330218
A38	SJ4577575573	Barn, now workshops	A Grade II listed farmhouse of 17th century date, with later alterations. Constructed of brown brick with corrugated roof.	18th century	1115394

Assess. (A) ref	NGR	Site Name	Description	Period	HER/NHL Ref.
A39	SJ4582175529	Farmbuildings at laurel farm	A Grade II listed farmhouse of late 18th or early 19th century date. Constructed of brick with slate and corrugated roofs.	18th-19th century	1320457
A40	SJ4422574567	Thornton-le-Moors CA	Thornton-le-Moors CA was designated in October 1981 (extended October 1996) and is centred around the Church of St Mary, which has 14th Century elements, including its tower. The latter has some landmark qualities within the village. Other notable buildings within the designation include Thornton Hall, which is a 17th century farmhouse, and Glebe Farmhouse dating from the 18th century. The historic interest of the designation lies in its relationship to agricultural industries, with two working farms still in use by 2000. The low scale nature of the village is in stark contrast to the industrial Stanlow Oil Refinery adjacent to its northern boundary. The industrial chimneys are prominent fixtures visually in backdrop views of the designation, with historic photos indicating that there was less woodland screening from the Refinery in the 1970s than in the present day. Thornton-le-Moors has been recorded since the Domesday Survey, and the manor changed hands a number of times during the medieval and post-medieval periods.	Medieval Post-medieval	DCH1310
A41	SJ4504276431	Ince CA	The Ince CA was designated in 1969 (extended in 2004 and 2023), with its importance associated with its rural village atmosphere and character. The designation is largely screened from the Stanlow Oil Refinery to the west, given the tree cover in the former parkland of Ince Hall. The parkland forms the western part of the designation, with the key buildings to the east. The	Medieval Post-medieval	DCH1459

Assess. (A) ref	NGR	Site Name	Description	Period	HER/NHL Ref.
			designation retains its medieval street pattern, with an informal layout of buildings through the village with a formal square at its centre. During the post-medieval period, agricultural and maritime industries were important factors in the village's development, and it largely grew to the north and east of the Grade II* listed Church of St James.		
A42	SJ4580475568	Elton CA	Elton CA was designated in 1979 and amended in 1996, centred around Ince Lane. There is no CA appraisal available for this area. Elton is mentioned in the Domesday book as part of the hundred of Ruloe, with a recorded population of 9 households in 1086. Notable buildings include the 17th century Rock Farmhouse, and there are numerous large farmhouse buildings located along Ince Lane. Conservation Area now sits at the centre of Elton, which has expanded during the 20th century.	Post-medieval	DCH1285
A43	SJ4484675790	Thornton Aero Engine Research Laboratory, Building 38, Off Pool Lane, Ince	N/A	Modern	DCH9505
A44	SJ4477075848	Thornton BPM (Laboratory Building No27), Pool Lane, Ince	N/A	Modern	DCH9541

Appendix B – Figures

Figure 1: Historic Environment Features Map

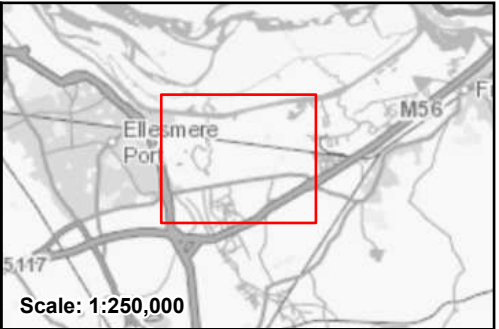
Figure 2: Thornton-le-Moors Tithe Map of 1838

Figure 3: First Edition Ordnance Survey map 25" 1873-4

Figure 4: Ordnance Survey 1:10,000 map of 1938

Figure 5: Provisional Ordnance Survey 1:10,000 Map of 1967-8

Figure 6: 1970 Plan of Stanlow Plant



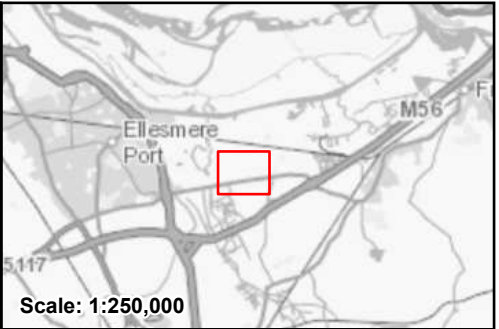
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Legend

- Site Red Line Boundary
- 1km Study Area
- Grade I Listed Building
- Grade II Listed Building
- Locally Listed Building
- Conservation Areas

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ESSAR ENERGY TRANSITION EET FUELS			
PROJECT TITLE: STANLOW HYDROGEN READY COMBINED HEAT AND POWER PROJECT - SCOPING REPORT			
DRAWING TITLE: FIGURE 1 HISTORIC ENVIRONMENT FEATURES MAP			
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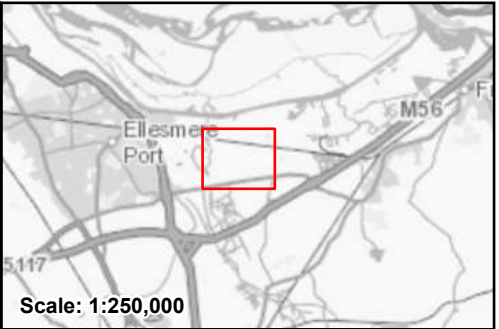


Legend

Site Red Line Boundary

(REPRODUCED WITH PERMISSION FROM CHESHIRE RECORD OFFICE; NOT TO SCALE)

ESSAR ENERGY TRANSITION EET FUELS			
PROJECT TITLE: STANLOW HYDROGEN READY COMBINED HEAT AND POWER PROJECT - SCOPING REPORT			
DRAWING TITLE: FIGURE 2: THORNTON-LE-MOORS TITHE MAP OF 1838 (REPRODUCED WITH PERMISSION FROM CHESHIRE RECORD OFFICE)			
CONFIDENTIALITY		PUBLIC	
DRAWN: PN	CHECKED: MH	APPROVED: LG	AUTHORISED: CL
SCALE @ A3 SIZE: 1:5,000		DATE: 29/06/2026	REVISION: P01
DRAWING NUMBER: N/A			



Legend

Site Red Line Boundary

(REPRODUCED WITH PERMISSION FROM
CHESHIRE RECORD OFFICE; NOT TO SCALE)



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HEAT AND POWER PROJECT
- SCOPING REPORT**

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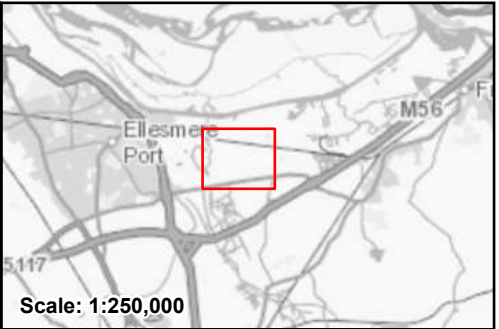
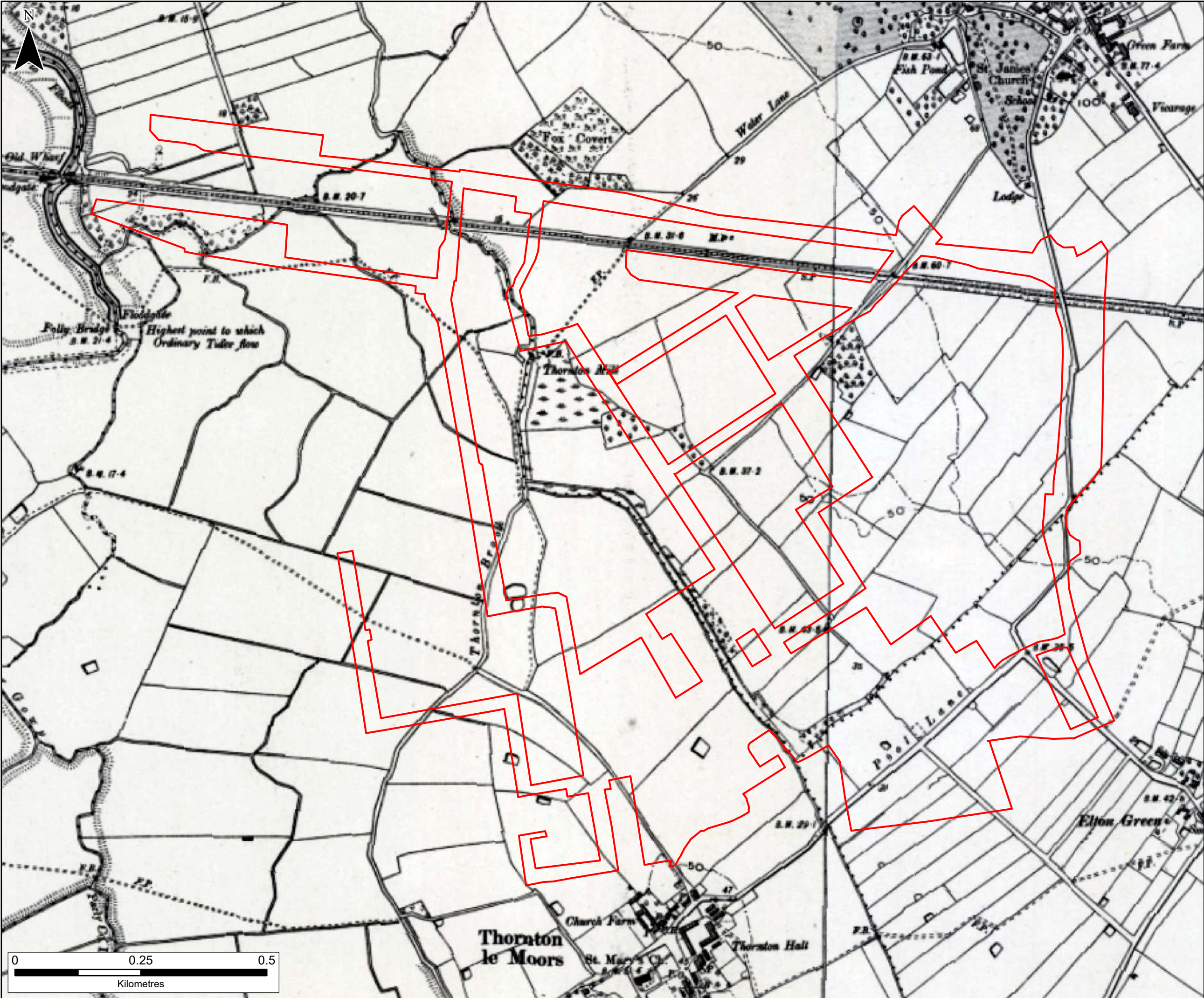
FIGURE 3:
FIRST EDITION ORDNANCE SURVEY MAP 25" 1873-4

CONFIDENTIALITY
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Legend
 Site Red Line Boundary

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PROJECT TITLE:
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HEAT AND POWER PROJECT
- SCOPING REPORT**

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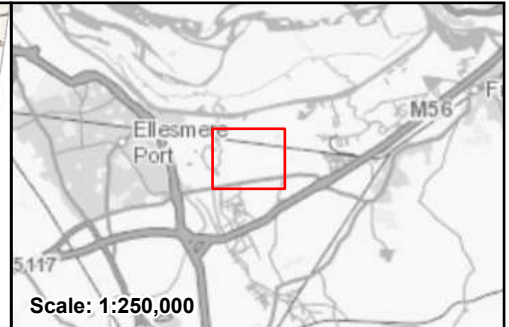
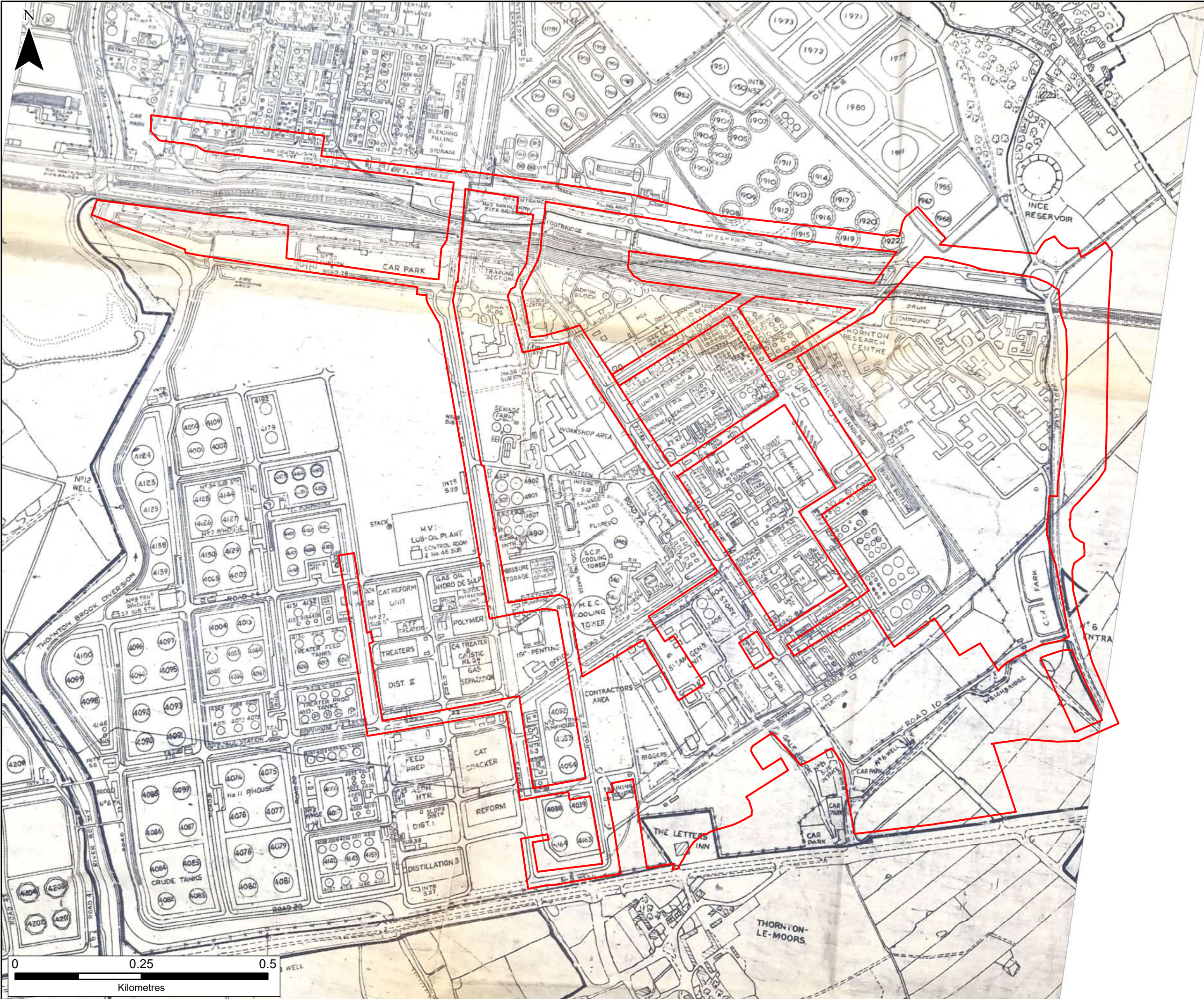
FIGURE 4:
ORDNANCE SURVEY 1:10,000 MAP OF 1938

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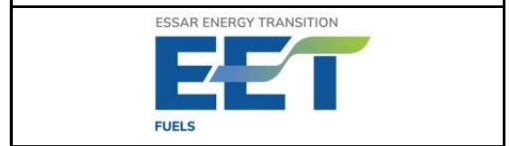


Scale: 1:250,000

Legend

Site Red Line Boundary

(NOT TO SCALE)



PROJECT TITLE:

**STANLOW HYDROGEN READY COMBINED
HEAT AND POWER PROJECT
- SCOPING REPORT**

DRAWING TITLE:

FIGURE 6:
1970 PLAN OF STANLOW PLANT
(REPRODUCED WITH PERMISSION
FROM GLOUCESTERSHIRE ARCHIVES)

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SCALE @ A3 SIZE: 1:7,000	DATE: 29/06/2026	REVISION: P01	

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EET Fuels

Stanlow Hydrogen Ready Combined Heat and Power Project Development Consent Order

Volume 3, Appendix 8.2: Heritage Technical Note

02-09-2026

Document ref: 2026UK550445-ENV-001



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TABLES

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FIGURES

No figures

1. Introduction and Method

- 1.1.1 This technical note has been prepared by WSP UK Ltd ('WSP') on behalf of Essar Energy Transition Fuels (EET Fuels) (hereafter referred to as 'The Applicant').
- 1.1.2 The Applicant is proposing to construct and operate a Hydrogen Ready Combined Heat and Power (CHP) facility at the Stanlow Manufacturing Complex (SMC). The Project is crucial for the decarbonisation of the SMC, enabling the Applicant to decarbonise its existing fuel use by replacing its existing fossil-fuelled steam and electricity production facilities with those capable of burning 100% hydrogen. The Project aligns with the UK Government's ten-point plan to help the UK achieve its net zero emission targets by 2050 (HM Government, 2020).
- 1.1.3 This technical note assesses the presence and extent of alluvium and peat deposits within the Proposed Development using geotechnical data, which provides detail of the subsurface deposits. Coupled with information on construction depth, this information is used to assess the potential impact on buried deposits with palaeoenvironmental potential, and any recommendations for further work.
- 1.1.4 This technical note has been informed by historic boreholes taken from the British Geological Survey (BGS, 2026), ground investigations undertaken by WSP in 2023 (WSP, 2023) and ground investigations undertaken by RSK Geosciences in 2024 (RSK Geosciences, 2024) and 2021 (RSK Geosciences, 2021).

2. Geotechnical Review

- 2.1.1 A review of available geotechnical boreholes and cone penetration tests has been undertaken to understand the presence and extent of alluvium and peat deposits within the Proposed Development. The analysis included the assessment of 46 boreholes. The key findings are as follows.

2.2 RSK 2024 report

- 2.2.1 The most recent ground investigations were undertaken in 2024 by RSK. There are ten boreholes within the Proposed Development, of which three encountered alluvium and peat.

Alluvium

- encountered in BH01, BH02, CPT01 undertaken by RSK (RSK Geosciences, 2024) located at the proposed location of the Gas Turbines (GT) and Heat Recovery Steam Generators (HRSG) within the Proposed Development;
- depths recorded at 4.43m and 5.0m below ground level (bgl);
- thickness varies between 2.99m and 3.70m;
- described as soft to firm sandy, slightly gravelly clay with thin layers of fibrous peat and occasional sand and gravel lenses, with “rare plant remains or organic pieces”; and
- cohesive soils of the alluvium are classified as of soft to firm and the density term of granular component as loose.

Peat

- identified within alluvium deposits encountered in BH01, BH02 and CPT01;
- found at depths ranging from 2.8m-4.5m bgl; and
- composition includes fibrous peat with varying thickness of 0.15m-0.5m.

2.3 WSP 2023 report

- 2.3.1 Ground investigations completed by WSP encountered made ground into tidal flats glacial till, bedrock, and peat. None of the investigations within the Proposed Development encountered alluvium. This investigation recorded eight boreholes within the boundary of the Proposed Development. Peat was only identified in

BC104A, located in the north part of the site. Peat was encountered at depths between 2.8-3.0m to 4.0-4.2m. The borehole recorded made ground to 1.4m, underlain by tidal flats to a depth of 2.8-3.0m. These were above the layer of peat which then encountered bedrock from 4.0-4.2m to 6m. Sandstone was recorded from 6m to the base of the borehole at 8m.

2.4 RSK 2021 report

2.4.1 Ground investigations completed by RSK encountered made ground into Devensian till and, bedrock. None of the investigations within the Proposed Development encountered alluvium or peat. This investigation recorded five boreholes within the Proposed Development.

2.5 British Geological Survey (BGS)

2.5.1 A search of BGS historic borehole logs identified 28 borehole records within the Proposed Development. Twenty of these boreholes had interim reports instead of final reports, and did not contain borehole logs. Of the boreholes that had publicly available reports peat was encountered in one, SJ47NW17. Peat was identified between 0.16m and 1.07m, interspersed with clay. The borehole comprised topsoil underlain by clay that had bands of peat, stones, and sand to a depth of 13.7m, which became sandstone with bands of marl. The borehole was sunk in 1940, seemingly prior to the SMC, and it seems likely that any peat of this depth would have been removed during the construction of the SMC.

3. Proposed Development Design

- 3.1.1 As part of the Proposed Development the Applicant is proposing to construct three 'trains' of GT and HRSG with foundation design at a depth of approximately 3m. Rigid inclusions will be deployed for ground improvement ahead of sheet piling as the preferred foundation design – however other forms of piling may be used following geotechnical investigations and detailed design. Should piling be required, it is likely to be GTs, HRSGs and Ammonia Tanks that will require piling.

4. Recommendations

- 4.1.1 Peat and alluvium deposits were recorded at depths of between 3.9m and 5.0m bgl at the planned location of the GTs and HRSGs. The foundations will be to a depth of approximately 3m. Therefore, there is no impact anticipated upon the recorded depths of peat and alluvium within the Site.
- 4.1.2 As a result, no further archaeological investigations are required. The foundation construction is situated outside the area containing deposits of possible palaeoenvironmental potential, and piling, should it be required, does not provide opportunities for meaningful archaeological monitoring. There is no impact upon any deposits with potential for palaeoenvironmental remains.

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EET Fuels

Stanlow Hydrogen Ready Combined Heat and Power Project Development Consent Order

**Volume 3, Appendix 9.1: Visual Impact Assessment
Methodology**

02-09-2026

Document ref: 2026UK550445-ENV-001



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1. Visual Impact Assessment Methodology

1.1 Introduction

- 1.1.1 This methodology provides the necessary guidance and process that has been undertaken in assessing the Proposed Development as presented in **Volume 1, Chapter 9: Landscape and Visual**. The Visual Impact Assessment (VIA) has been produced in accordance with best practice by suitably qualified Landscape Architects that are Chartered Members of the Landscape Institute (CMLI).
- 1.1.2 The visual assessment considers the views that are available to people who may be affected by a development and their perception and responses to changes in these views.

1.2 Guidance

- 1.2.1 In addition to the legislation, policy and guidance set out in **Volume 1, Chapter 3: Approach to EIA**, the primary source of guidance for the Landscape and Visual Chapter is the Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3) (Landscape Institute (LI) and the Institute of Sustainability and Environmental Professionals (ISEP), 2013). The following sources (ordered by date) have also been referred to in the preparation of the methodology for the VIA and production of visual representations:
- ISEP, Guidelines for Environmental Impact Assessment (2004) (ISEP, 2004);
 - LITGN-2024-01, Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment Third edition (GLVIA3), 2024 (Landscape Institute, 2024);
 - An Approach to Landscape Character Assessment. Natural England, 2014 (NE, 2014); and
 - Technical Guidance Note 06/19, Visual Representation of Development Proposals, Landscape Institute, 2019 (Landscape Institute, 2019).

1.3 GLVIA3

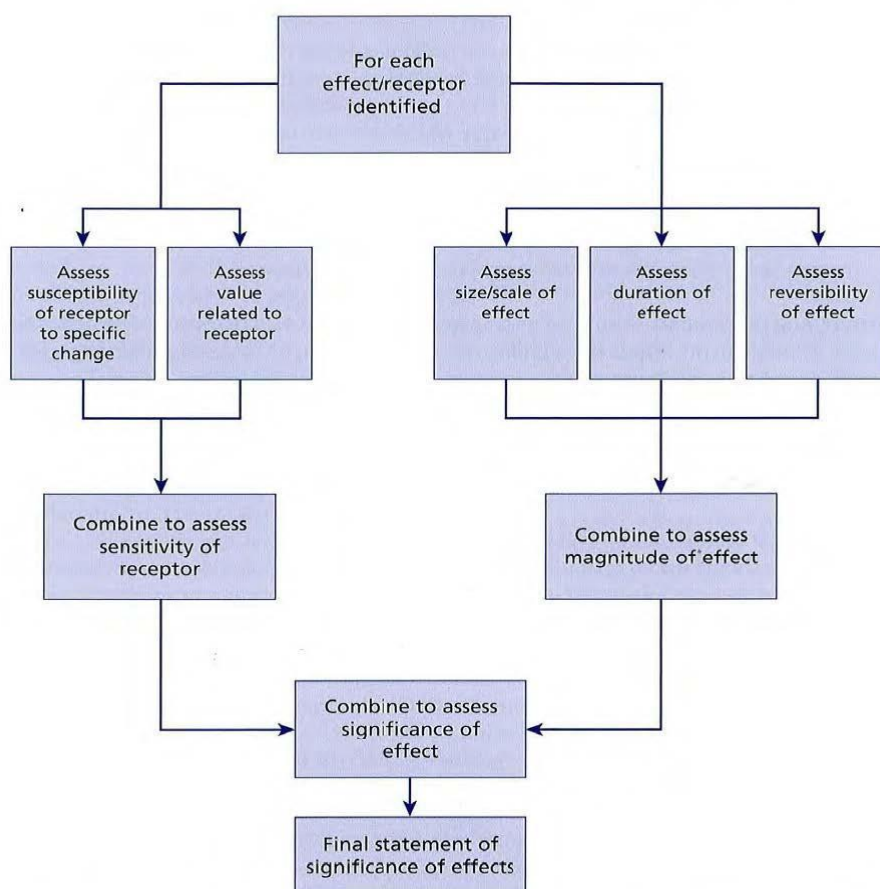
- 1.3.1 The methodology is consistent with the approach and process set out in GLVIA 3, as summarised in the flow diagram presented in **Plate 1.1** below, as taken from page 39 of GLVIA3.

1.3.2 In summary, the assessment involves the following key stages:

- establishment of the baseline conditions; the landscape character and visual context of the receiving environment and the sensitivity to change of these resources;
- contributions to the iterative process of design and mitigation (embedded and secondary) based on understanding the nature, form and features of the Proposed Development in relation to the key visual sensitivities;
- an evaluation of the magnitude of change likely to result from the Proposed Development, both during construction and in operation on visual amenity;
- an evaluation of the cumulative magnitude of change likely to result from the Proposed Development in conjunction with other similar existing or future developments, both during construction and in operation on visual amenity;
- an assessment of the significance of visual effects considering the sensitivity of resources and the magnitude of change; and
- an assessment of the cumulative significance of visual effects considering the sensitivity of resources and the magnitude of change.

Plate 1.1 Flow diagram from GLVIA3 page 39

3 Principles and overview of processes



1.3.3 The visual assessment has taken into consideration how the current baseline conditions may change going forward to the point of construction. Due to the limitations, necessary assumptions and lack of evidence associated with the future baseline, a detailed consideration of the effects of the Proposed Development against the future baseline would generally not result in a robust assessment depending on the length of future prediction. However, the future baseline with relevance to VIA is considered in descriptive terms. This may include developments in construction and consented developments in particular but also other changes such as forestry works, implications of tree diseases, changes to land use and settlement patterns for example.

1.3.4 For the visual assessment, the significance of effect will be derived from the combination of the magnitude of change and the sensitivity of the visual receptor. Criteria tables are used to guide the decision-making process for assessing sensitivity and magnitude and how these are considered together to reach an assessment of significance of effect. These tables are guidelines to illustrate typical outcomes and not to be used as a prescriptive tool. It should be noted that professional judgement is always used in determining both the sensitivity of a

receptor and the magnitude of change. There are situations where the conclusions regarding significance in this **Volume 1, Chapter 9: Landscape and Visual** will differ from that suggested by the significance matrix which reflects the application of professional judgement.

1.4 Study Area

- 1.4.1 The Study Area defines the area in which significant effects are likely to occur. Visual effects can only occur where a development is visible. Where receptors are closer to the Site, it is expected that effects will be greater than those located at the outer edges of the Study Area which are likely to experience lower effects.
- 1.4.2 GLVIA3 clarifies how study areas should be determined on a project specific basis for visual receptors. Paragraph 5.2 of GLVIA3 states in Paragraph 6.2 for visual receptors the study area *“should consider the area from which the Proposed Development will potentially be visible.”*
- 1.4.3 The proposed Study Area is based on a combination of professional judgement and an analysis of the height and extent of the Proposed Development, as defined shown on **Volume 2, Figure 9.5: ZTV and Viewpoint Location Plan**; as well as from data obtained from the previous field visits (during Phase 1).

1.5 Information and Data Sources

- 1.5.1 The first stage of the process is to collect data through a desktop study of the Site and the Study Area. This research identifies information such as views from key locations such as routes and settlements.
- 1.5.2 Geographical Information Systems (GIS) and Google Earth are used to explore the potential visibility of the Proposed Development. The Zone(s) of Theoretical Visibility (ZTV) informs the identification of visual receptors that are likely to be pertinent to the assessment. The technical methodology for the production of ZTVs and visualisations is provided in this methodology.

1.6 Visual Receptors

- 1.6.1 Visual effects relate to changes in available views of the landscape and the effect of those changes on people, including:
- the immediate impact of the Proposed Development on the content and character of views (e.g. through intrusion or obstruction and/or the change or loss of existing elements in the view); and
 - the broader impact considering the overall change on visual amenity enjoyed by receptors in the area.

- 1.6.2 GLVIA3 advises that it is helpful to consider (but not restricted to) the following:
- nature of the view (open, panoramic, framed, enclosed);
 - proportion of the Proposed Development visible (full, most, part or none);
 - distance of the viewpoint from the Proposed Development and whether it will be the focus of the view or only a small element;
 - whether the view is stationary, transient or sequential; and
 - the nature of the changes to the view.
- 1.6.3 Additionally, the seasonal effects of vegetation would be considered, in particular the varying degree of screening and filtering of views.
- 1.6.4 The sensitivity of a visual receptor reflects their susceptibility to change and any values which may be associated with the specific view. The sensitivity of the visual receptors is determined by separately considering the visual receptor value and the susceptibility of the visual receptor to the change proposed.

Visual Value

- 1.6.5 Certain views are highly valued for either their cultural or historical associations, which can increase the sensitivity of the viewer, as set out in **Table 1.1**.

Table 1.1 Visual value

Value	Recognition	Indicators of value
High	Recognised views from nationally or internationally important landscape or heritage resources may be identified in planning policies or statutory documents.	High value/celebrated view; referred to in national or international guide books, tourist guides etc.; literary and art references; presence of interpretive facilities (e.g. visitor centre).
Medium	Recognised views from local or regionally important landscape or heritage resource may be identified in local planning policies or supplementary planning documents.	Moderately valued view; referred to in local or regional guide books, tourist maps etc.; local literary and art references; presence of some interpretive facilities (e.g. parking places or sign boards).
Low	Locally recognised views, usually informal.	Valued view but no formal references, may include informal footpaths that indicate well used routes by locals. Likely to be common where views are typical of the location with little distinctiveness, lacking in attractors or detractors.
Negligible	Little to no recognition.	Not known locally for its views, places that lack evidence of people actively seeking use and therefore any associated views.

Visual Susceptibility

- 1.6.6 When determining visual susceptibility, a range of factors are considered that fit on a sliding scale from high to negligible, as set out in **Table 1.2**. For example, a view experienced by a resident of a property in close proximity and overlooking the Site will be expected to fall within the higher end of the sliding scale.

Table 1.2 Visual Susceptibility

Susceptibility to proposed change	
High 	- residents at home; - walkers on long distance trails and mountain access routes, - users of footpaths where the attractive nature of the countryside is a significant factor in the enjoyment of the walk, - cyclists on national and local cycle routes designed to provide an attractive experience; - road users on recognised tourist routes; and - visitors to landscape and heritage resources and other attractions where views of the surroundings are an important contributor to appreciation, experience and/or enjoyment.
Medium	- general road users; - passengers on rail lines where the trains run at low or moderate speeds; - users of public open space and footpaths where the nature of the surroundings is not a significant factor in the enjoyment of the activity; and - visitors to landscape and heritage resources and other attractions where views of the surroundings are a minor contributor to appreciation, experience and/or enjoyment.
Low	- people at their place of work or shopping; - users of high speed roads and passengers in trains running at high speed; - people engaged in recreational activities where the view of the surroundings is secondary to the enjoyment of the activity (such as playing or spectating at outdoor sports facilities); and - users of public open space and footpaths where the nature of the surroundings is irrelevant to the enjoyment of the activity.
Negligible 	Users of indoor facilities where the view is irrelevant to their activity.

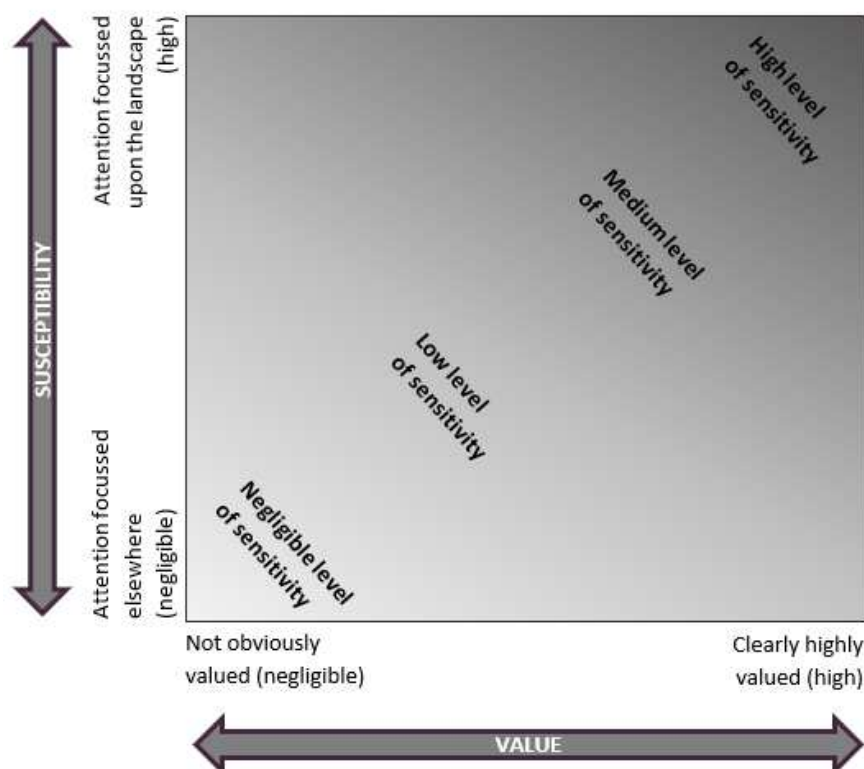
Visual Sensitivity

- 1.6.7 Susceptibility and value can be combined in different ways to form a judgement about the visual sensitivity of a given receptor. It is generally accepted that a combination of high susceptibility and high value is likely to result in the highest sensitivity, whereas a low susceptibility and low value is likely to result in the lowest level of sensitivity.
- 1.6.8 However, whilst a valued view may serve to increase the overall sensitivity of the visual receptor, a low value will not necessarily reduce overall sensitivity. Whilst it

will be anticipated that visual receptors considered highly susceptible to the proposed change will be considered to be of high sensitivity, this would not be the case if there were reasons associated with the value of the view that lead to a reduction in sensitivity. For example, a resident at home will generally have a high sensitivity to the proposed change, but if the view they currently experience is of a low value degraded and industrial landscape it can be expected that their susceptibility to a proposed change of a similar industrial nature will be reduced.

- 1.6.9 Similarly, receptors considered of low or medium susceptibility are usually in the same category of sensitivity, unless there are reasons associated with the value of the view that lead to an increase in sensitivity, which is shown in **Table 1.2**. For example, where a road user on a defined tourist route will have a higher susceptibility to the proposed change than if travelling on a busy main road.
- 1.6.10 The diagram in **Plate 1.2** illustrates typical characteristics of the different levels of sensitivity taking into account the value and susceptibility as described above. When determining overall visual sensitivity, it should be noted that the levels are indicative and fall on a sliding scale from high to negligible and professional judgement is always used to determine the overall level of sensitivity.
- 1.6.11 Any visual receptors assigned a negligible level of sensitivity will not be further considered as part of the assessment on the basis that significant effects are highly unlikely as demonstrated by **Table 1.6**.

Plate 1.2 Level of visual sensitivity diagram



1.7 Assessing Magnitude of Change

1.7.1 The magnitude of visual change depends upon a combination of factors including:

- the size, scale and nature of change in relation to the context;
- the geographical extent of the area influenced; and
- its duration and reversibility.

Size/Scale of Change

1.7.2 The size/scale of change to the visual receptors that will arise because of the Proposed Development will take account of the following factors and as set out in **Table 1.3**.

Visual

- the scale of change in the view (addition or loss of features) and changes to its composition and depth of view;
- the degree of contrast or integration of new features or characteristics into the existing visual baseline considering form, scale, mass, height, colour and texture; and
- the nature of the view of the Proposed Development, the time over which it will be experienced and changes in the experience from for instance full, partial, glimpsed to screened.

Table 1.3 Scale of Change

Size/scale of change	
High 	- occupies a wide proportion of the view or would obstruct a significant portion of the view; - the Proposed Development would become the dominant feature; and - considerable change to the majority/many existing landscape elements and/or landscape character; fundamental changes to the surroundings and baseline to a large extent; very noticeable.
Medium	- occupies much of the view but would not fundamentally change its characteristics; - changes would be immediately visible but not a key feature of the view; and - some change to existing landscape elements and /or landscape character; discernible changes to the surroundings of a receptor, such that its baseline is partly altered; readily noticeable.
Low	- occupies a small portion of the view and would only slightly alter the view's composition; and - small change to existing landscape elements and/or landscape character; slight, but detectable impacts that do not alter the baseline of the receptor materially; not readily noticeable.
Negligible 	- occupies little or no portion of the view and would not result in a change to the view's composition; and - little or limited /no change in existing landscape elements and/or landscape character, barely distinguishable change from baseline conditions; not noticeable.

Geographical Extent

1.7.3 The geographical extent of the Proposed Development in relation to visual receptors is also considered as set out in **Table 1.4**. This is distinct from the size and scale of effect.

1.7.4 In terms of visual effects, the geographical extent of the Proposed Development will vary based on the location of the visual receptor and consideration will be given to:

- the angle of the view in relation to the main activity of the receptor and the main focus of the view;
- the distance of the visual receptor from the Proposed Development; and
- the extent of the area over which the changes will be visible.

- 1.7.5 For visual receptors moving through the landscape (e.g. road and rail users) the length of the journey during which they will see the development is reflected in the judgement of the geographical extent of effects.

Table 1.4 Geographical Extent of Change

Geographical extent of change	
High	The assessment location is representative of similar effects over an extensive geographic area. The change would affect a large number of receptors and would have high influence on the view.
Medium	The assessment location is representative of similar effects over a moderate geographic area. The change would affect a moderate number of receptors and would have moderate influence on the view.
Low	The assessment location represents a small geographic area. E.g. the change would influence the immediate setting of the site. The development would be perceived locally, with a minor effect on wider views.
Negligible	The assessment location clearly represents a small geographic area. E.g. the change would influence the site level within the development site itself. The development would be perceived only locally, with a limited effect on wider views.

Duration and Reversibility

- 1.7.6 Duration and reversibility are particularly important when considering the different stages of the project. As stated in GLVIA3 (paragraph 5.51) “*duration can usually be simply judged on a scale such as short term, medium term or long term*” and is defined in **Table 1.5**.
- 1.7.7 Reversibility (paragraph 5.52 of GLVIA 3) “*is a judgement about the prospects and the practicality of a particular effect being reversed in, for example a generation.*” Some forms of development are considered effectively permanent such as housing developments, whilst others such as solar farms can be considered temporary or reversible since they have a limited operational life and can be removed and land reinstated. In the case of the Proposed Development, it would be considered permanent in landscape and visual terms on the basis that the infrastructure is above ground and will be perceived within the landscape once construction is completed, and effects will be permanent and long term. It could be decommissioned but reference should be made to the proposed lifespan of the planning submission. If there are no proposals to limit the lifetime of the Proposed Development the assessment will consider that it will be permanent and long term.

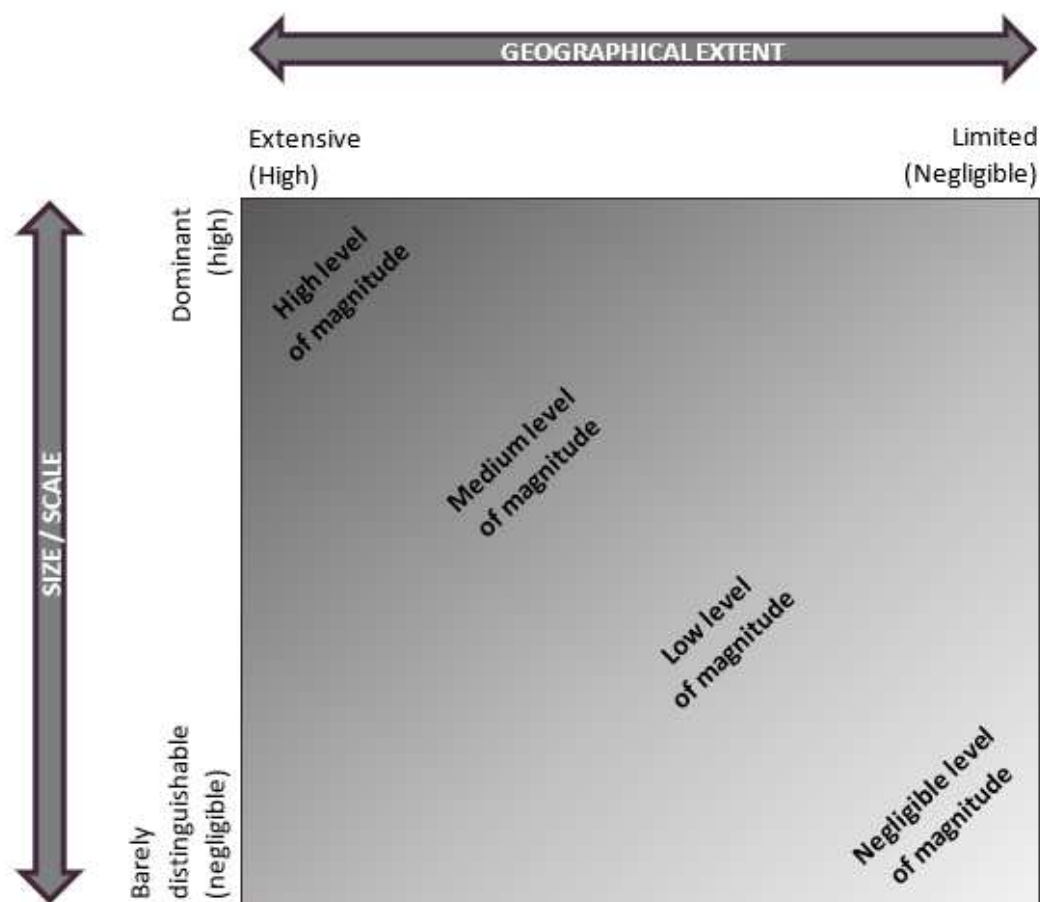
- 1.7.8 The effects during construction of the development are usually assessed as temporary and short term but will vary depending on the site and planning construction programme.

Table 1.5 Duration of change

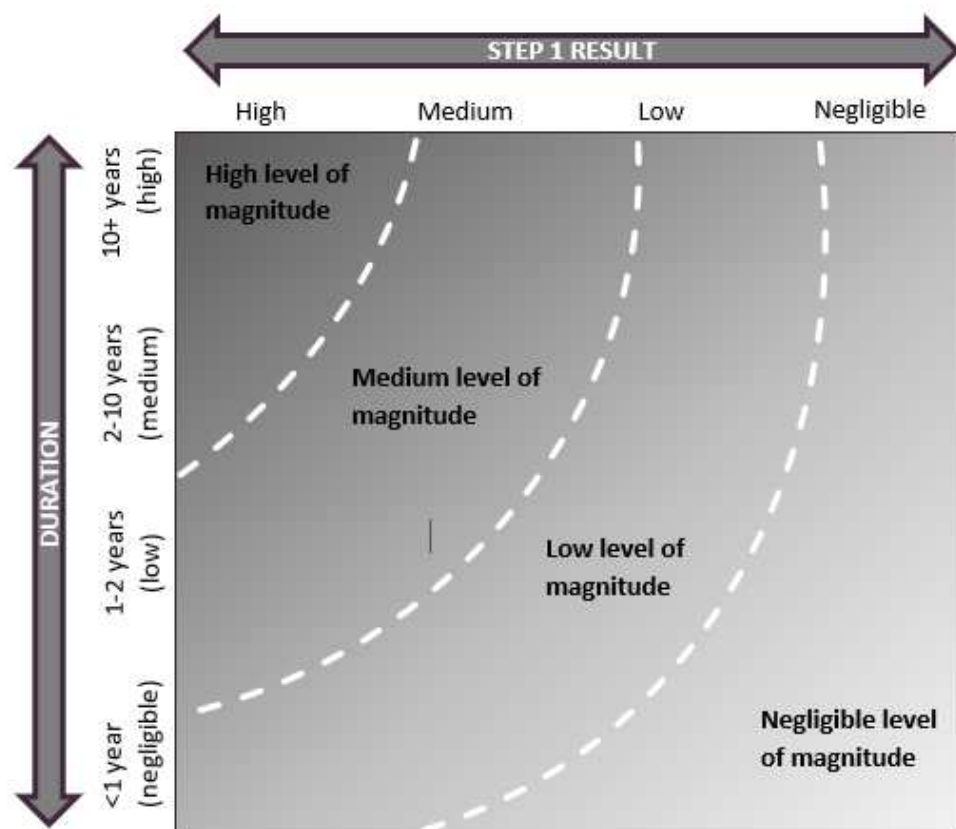
Duration of change	
High	Long term/10 years +
Medium	Medium term/2-10 years
Low	Short term/1-2 years
Negligible	Brief term/<1 year

Magnitude of Change

- 1.7.9 Like with sensitivity, combining the scale, geographical extent, and duration/reversibility of the change together requires careful consideration and professional judgement. As such, the assessment will separately consider each aspect to form the judgement of overall magnitude. **Table 1.3** to **Table 1.5** have demonstrated these individual judgements. The following **Plate 1.2** and **Plate 1.3** illustrate how these are combined through a two-step process. First by considering size and scale together with the geographical extent in step one. The result of this gives us a preliminary magnitude of change result.

Plate 1.3 Magnitude of change diagram: Step 1

- 1.7.10 As illustrated below in the diagram presented as **Plate 1.4**, for step two, the preliminary result from step 1 is then considered alongside the duration and reversibility which can either increase or decrease the rating accordingly. For example, a high magnitude of change could be reduced if this is only going to be experienced over a short period of time. This is typical of construction activities where they are both short term and of a temporary nature.

Plate 1.4 Magnitude of change diagram: Step 2

1.8 Level of Effect and Significance

- 1.8.1 Professional judgement is used to combine sensitivity and magnitude to gauge the level of effect and determine whether it is significant or not with a clear rationale for the overall judgement.
- 1.8.2 **Table 1.6** provides general guidance on the inter-relationship between magnitude of change and sensitivity of receptor. However, this matrix is used as a framework and guide for consistency, not as a prescriptive formula: the level of effect and thus significance will vary depending on the circumstances, the type and scale of development proposed, the baseline context and other factors as set out in the previous sections. **Table 1.6** below, gives typical descriptors of the levels of visual effects.

Table 1.6 Significance matrix

Significance matrix					
		Magnitude			
		High	Medium	Low	Negligible
Sensitivity	High	Major	Major or Moderate	Moderate	Minor or Negligible
	Medium	Major or Moderate	Moderate	Moderate or Minor	Negligible
	Low	Moderate	Moderate or Minor	Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

- 1.8.3 Using professional judgement, the assessments within this chapter consider effects of moderate and greater level of effect to be significant (as shown in bold in **Table 1.6**) while those less than moderate to be non-significant.
- 1.8.4 For the purposes of proportionality and to ensure the effects that are significant are the key focus of this assessment, any visual receptors assigned a negligible level of sensitivity will not be further considered as part of the assessment on the basis that significant effects are highly unlikely as demonstrated in **Table 1.6**, negligible sensitivity receptors can only experience a negligible level of effect.
- 1.8.5 Similarly, any receptors assigned an overall negligible level of effect at operation phase Year 1 will not be further considered or assessed in year 15 on the basis that effects are highly unlikely to increase to a level of significance at year 15 given year 1 is considered to present the worst case scenario at operation.

Visual Level of Effect

- 1.8.6 Through the steps carried out above, the resulting visual level of effect is arrived at. **Table 1.7** below presents the sliding scale for visual effects and can be summarised in the following descriptions.

Table 1.7 Visual level of effect

Visual level of effect	
Major	The Proposed Development would result in major changes to visual receptors and these would be considered significant.
Moderate	The Proposed Development would result in moderate changes to visual receptors and these would be considered significant.
Minor	The Proposed Development would result in minor changes to visual receptors and these would be considered non-significant.
Negligible	The Proposed Development would result in negligible changes to visual receptors and these would be considered non-significant.

Nature of Effect

- 1.8.7 Effects can be either beneficial or adverse and, in some cases, neutral (neither beneficial nor adverse).
- 1.8.8 The nature of effect of infrastructure on visual amenity is very subjective, with a broad spectrum of opinion on the appearance of infrastructure in the landscape. Some people see infrastructure as a necessity, that addresses the needs of society, whilst others regard them as alien and an industrialisation of the countryside.
- 1.8.9 The aim of the VIA is to provide an objective assessment of the relationship between the Proposed Development and the landscape in which it will be located and seen. As part of this it is also important to consider the nature of the proposed change in the context of the key characteristics of the landscape. As large, engineered structures are being added to the landscape and will be visible, it is unlikely that a beneficial nature of effect will be found, but neutral effects could occur where it is considered the Proposed Development does not change the defining visual characteristics of the landscape.
- 1.8.10 For the purposes of this VIA, and to ensure this VIA assesses the worst case scenario, the nature of all effects will be considered as adverse, unless otherwise identified through mitigation.

1.9 Assessment Scenarios

- 1.9.1 The effects of the Proposed Development on receptors vary over time due to daily changes in light level, seasonal variation and over the longer term the maturing of intervening vegetation. The following scenarios are assessed:
- Construction Phase - Day: During construction assuming a maximum perceived change situation (i.e. when construction activity is at its peak).

- Operational Phase Year 1: A winter's day in the year that the Proposed Development will be fully operational.
- Operational Phase Year 15: A summer's day in the fifteenth year after opening (i.e., when intervening planting can be assumed to have matured. This is usually a reflection of the near fully mitigated scenario under normal conditions.

1.10 Assessment of Cumulative Effects

- 1.10.1 The methodology for the Cumulative Effects Assessment is presented in **Volume 1, Chapter 19: Cumulative Effects and Combined Effects**.

1.11 Visual Representations

- 1.11.1 The methodology for undertaking ZTVs and preparing visual representations will be compliant with relevant sections of:
- Visual Representation of Development Proposals, Technical Guidance Note 06/19', (Landscape Institute, 2019); and
 - Guidelines for Landscape and Visual Impact Assessment' Third Edition, (GLVIA3) (Landscape Institute (LI) and the Institute of Sustainability & Environmental Professionals (ISEP), 2013).
- 1.11.2 The LI guidance provides detail on maintaining a proportionate approach to visualisations, providing advice on selecting visualisation types taking into account the intended purpose, anticipated users, planning stage, sensitivity of the context, and indicative overall level of effect. This is helpful in consideration of responding to stakeholder and public requests where it may not always be appropriate to produce the full suite of visualisations.

Zones of Theoretical Visibility

- 1.11.3 ZTVs are used to identify the theoretical visibility of the Proposed Development. It is a computer-generated analysis which evaluates visibility using the height and extent of the Proposed Development against a digital terrain model (DTM).
- 1.11.4 ZTVs are produced using Geographic information System (GIS) software (ESRI ArcGIS). Coordinates of the Proposed Development were input into GIS and the proposed development parameters were assigned to account for the tallest operational feature within the Proposed Development. OS Terrain Data 5 is used for the DTM (known as bare earth data) which provides a suitable level of detail to produce the ZTV, in accordance with guidance. Observer height is set to 1.6m above ground level and the Earth's curvature and atmospheric refraction are taken into account.

- 1.11.5 The resulting ZTVs are set up in the GIS figure template associated with the project.
- 1.11.6 There are limitations with the preparation of ZTVs as follows:
- The ZTV illustrates the 'bare ground' situation, and does not take into account the screening effects of vegetation, buildings or other surface features.
 - The ZTVs are based on theoretically visibility from 1.6m above ground level.
 - The ZTV does not indicate the decrease in visibility that occurs with increased distance from the Proposed Development. The nature of what is visible from 1km away will be markedly different from what is visible from 5km away.
- 1.11.7 These limitations mean that while the ZTVs are used as a starting point in the assessment to determine where the Proposed Development will be theoretically visible from, such information needs to be verified in the field to ensure that the assessment conclusions are accurate.

Visualisations

- 1.11.8 The necessity for photomontages from agreed viewpoints has been determined in consultation with Cheshire West and Cheshire Council. All photographs and visualisations are produced in line with Landscape Institute Technical Guidance Note (TGN) 06/19 (Landscape Institute, 2019); 'Visual Representation of Development Proposals'. Annotated photo-panoramas (to TGN 06/19 Type 1). Wirelines were established using known plot locations and elevation drawings indicating the maximum height parameters for the main built form and chimney stack.

Baseline Photography

- 1.11.9 The key aspects of the methodology include:
- a 50mm fixed lens on a SLR camera with a full frame sensor;
 - tripod with a panoramic head;
 - camera positioned at 1.6m height;
 - 50% overlap on panoramic photographs to minimise distortion when stitching the photographs;
 - portrait orientation photographs taken for viewpoints close to the Proposed Development to ensure full vertical extent of the Proposed Development can be seen;
 - at least a 180-degree panorama taken (where the viewpoint allows); and
 - grid reference recorded at each viewpoint location.

2. References

Institute of Sustainability and Environment Professionals (ISEP), (2004). *Guidelines for Environmental Impact Assessment*.

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PUBLIC

(EET) Fuels

Stanlow Hydrogen Ready Combined Heat and Power Project Development Consent Order

Volume 3, Appendix 16.1: Preliminary Risk Assessment

02-09-2026

Document ref : 2026UK550445-ENV-001



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1. Introduction

1.1 Authorisation

- 1.1.1 WSP UK Limited (WSP) was instructed by Essar Oil UK Limited (EOUKL), trading as EET Fuels Limited (the Client), to undertake a desk-based Phase 1 Preliminary Risk Assessment (PRA) Report for a plot of land (henceforth referred to as CHP Phase 2) located at Stanlow Manufacturing Complex (SMC), Ellesmere Port, CH65 4BF.
- 1.1.2 The PRA Report has been completed to support a Development Consent Order (DCO) application to facilitate the Client's proposal to construct Phase 2 of a new Combined Heat and Power Plant (CHP), which is in addition to Phase 1. The Town and Country Planning Act (TCPA) 'major' full planning application (Reference: 25/03828/FUL) was submitted to Cheshire West and Chester Council (CWCC) in December 2025 and determination is expected in summer 2026.
- 1.1.3 The Red Line Boundary for the Proposed Development is presented as **Figure 1: Site Location Plan** in **Appendix A: Figures**.

1.2 Proposed Development

- 1.2.1 The components of the Proposed Development are described in **Volume 1, Chapter 2: The Proposed Development**.
- 1.2.2 The Proposed Development will also include cooling equipment to support efficient operation, and areas for chemical storage, including up to two additional ammonia storage units, pipe support structures, water cooling systems and equipment used to safely manage water and chemical dosing.
- 1.2.3 Although the CHP Phase 2 Red Line Boundary covers an area of approximately 67.32 hectares (ha) in size, this includes areas to facilitate development including areas for back-up generation, construction laydown, access roads etc. For this assessment the CHP Phase 2 Red Line Boundary has been divided into four areas as shown on **Figure 2: Site Areas** in **Appendix A: Figures** and summarised as follows:
1. Construction Areas – these are areas where buildings or back-up generation will be constructed. It is assumed that ground works including foundations could be excavated in these areas and it is assumed, for human health purposes, that any buildings on these areas could be occupied during the operational phase.

2. Below ground cables – these are potential routes that would be excavated using an assumed trenching method to allow the installation of cables. For human health purposes, excavation has been assumed as a worst case.
3. Laydown / construction compounds – these areas will be used to store cabins, equipment including machinery, and building materials. Following completion of the development it is assumed that these areas (some of which are part of other Proposed Developments) will be returned to dis-used space or re-developed under other future planning applications.

1.2.4 Above ground cables/fuel or pipelines and access roads – these areas are assumed for human health purposes to not require any below ground works. Any works would involve installing cables in existing above ground ducting or the use of roads for moving materials around Site.

1.3 Aims and Objectives

- 1.3.1 The primary purpose of the PRA Report is to set out the current understanding of the existing ground conditions and soil related baseline conditions (prior to mitigation). The specific objectives of the PRA Report are:
- collation of available information on soil, geology (including potential mineral resources and peat deposits) hydrology and hydrogeology to establish the environmental sensitivity of the CHP Phase 2 site with regards to human health, controlled water and the built environment;
 - identification and assessment of potential soil and groundwater contamination related risks associated with the CHP Phase 2 site;
 - identify any soil resources (agricultural land or mineral resources) that could be impacted during the construction or operation of the proposed CHP Phase 2 site; and
 - identification and assessment of potential ground stability related constraints.

1.4 Project Scope

- 1.4.1 The following scope of works was undertaken to meet the aims and objectives of the PRA:
- a review of existing information available for the CHP Phase 2 site.
 - public record databases review (site-specific Groundsure Enviro Insight and Geo Insight reports).
 - review of contemporary and historical Ordnance Survey maps (provided within the Groundsure Insight reports).

- a site walkover of selected accessible areas (undertaken originally on 21 October 2024 with a supplementary walkover on 18 May 2026).
- review of geological, soil resources (including agricultural land), mineral resources, hydrogeological and hydrological maps.
- preliminary unexploded ordnance (UXO) assessment (dated 17 September 2024).
- completion of a preliminary environmental risk assessment including derivation of a preliminary Conceptual Site Model (CSM).

1.5 Sources of Information

1.5.1 The information presented within this PRA Report has been collated from the following sources:

- a WSP site walkover on 21 October 2024 with a supplementary walkover on 18 May 2026 (Photographs in **Appendix B: Site Walkover Photographs**) (WSP, 2024; 2026);
- Groundsure Report (ref:WSP-5TH-X41-GYO-JOL) dated 28 April 2026 (Groundsure Report, 2026) (included in **Appendix C: Groundsure Report**);
- review of contemporary and historical Ordnance Survey maps (provided within the Groundsure Insight reports) (Groundsure Report, 2026);
- BGS Mineral Resources Map, 1:100,000 map series, Cheshire (BGS, 2026);
- Geological Survey of England and Wales, 1:50,000 geological map series Sheet 97, 1980, Solid and Drift (BGS, 1980);
- information from the Mining Remediation Authority Interactive website (Mining Remediation Authority, 2026);
- information from MAGIC Map Application website (Defra, 2026);
- information from Cranfield Soilscales website (Cranfield University, 2026); and
- a Preliminary Unexploded Ordnance (UXO) Assessment conducted by Zetica (Zetica, (2024) (included in **Appendix D: UXO Preliminary Assessment**).

1.5.2 The following existing report(s) have previously been produced for the wider SMC and have been consulted during the production of this report:

- WSP (2023) Site Protection Monitoring Plan (SPMP) Baseline - Stanlow Manufacturing Complex, Dated: 30 March 2023, Ref: 70085469.(WSP SPMP, 2023); and
- WSP (2025) Combined Heat and Power Phase 1 – Preliminary Risk Assessment, Dated: March 2025, Ref: UK0029978.7045 (WSP, 2025).

1.6 Limitations

1.6.1 The general limitations associated with this PRA Report are included in **Appendix E: General Limitations**.

1.6.2 The Groundsure Report in **Appendix C: Groundsure Report** was originally purchased for a Red Line Boundary that was marginally different than the current Red Line Boundary. However, the Groundsure Report contains information on the areas not within that Red Line Boundary and is therefore considered acceptable for use within this report.

1.7 Reliance

1.7.1 This PRA Report is addressed to and may be relied upon by the following:

- Essar Energy Transition (EET) Fuels.

1.7.2 The assessment in this PRA Report has been prepared for the sole use of the above-named party. This PRA Report shall not be relied upon or transferred to any other parties without the express written authorisation of WSP. No responsibility will be accepted where this PRA Report is used in its entirety or in part, by any other party. Information provided by others is taken in good faith as being accurate. WSP cannot and will not accept liability in third party information.

1.8 Approach to Contamination Assessment

1.8.1 The potential risks from contamination within soil and groundwater are assessed according to the environment setting/ground model, likely presence of potential sources of contamination and the proposed use of the CHP Phase 2 Site.

1.8.2 The source-pathway-receptor model forms the basis of the PRA. Potential risks are only considered to exist if there is a credible source (e.g., a chemical substance capable of causing harm); a pathway for migration of the source to the receptor; and a sensitive receptor that could be affected (e.g. nearby river or site users). A source-pathway-receptor contaminant linkage assessment is termed a

conceptual model (CSM). A preliminary CSM is produced prior to intrusive ground investigation and is refined following collection of site-specific data (if appropriate).

1.9 Understanding Risk

- 1.9.1 It is important to recognise that any risks identified during a PRA are perceived risks based on the recorded information reviewed. A more detailed assessment would require site-specific data from intrusive investigation. The preliminary assessments presented herein are qualitative based on professional judgements following review of the available data and within the context of the existing/proposed use. The risk categories presented follow guidance presented in CIRIA Publication C552, Contaminated Land Risk Assessment – A guide to good practice. A copy of CIRIA C552 risk appraisals methodology is presented in **Appendix F: CIRIA C552**.

1.10 Justification of Buffer

- 1.10.1 This PRA Report covers land within the Site Boundary. As per the WSP Scoping Report (Ref: WSP 2026 CHP Phase 2 Scoping Report) the following buffer zones have been adopted:
- a 50m buffer from the site boundary will be utilised for identifying potential sources of contamination posing a risk to human health receptors.
 - a 250m buffer from the site boundary will be utilised to identify potential source of contamination posing a risk to controlled waters receptors.
- 1.10.2 The above buffers are consistent with the document 'Guidance for the Safe Development of Housing on land affected by Contamination - R&D66' (NHBC and Environment Agency, 2008) when considering impacts of contamination on sensitive receptors.

2. Site Setting

2.1 Site Description and Current Land Use

2.1.1 Pertinent site walkover information is included in **Table 1** and a site photolog is included in **Appendix B: Site Walkover Photographs**.

Table 1 Pertinent site walkover information

Item	Information
Site Address	Stanlow Refinery, Ellesmere Port, CH65 4HB
Coordinates	344292, 375089 (centre point near proposed construction area)
Current Site Use and General Layout	The CHP Phase 2 site is an irregular shaped parcel of land that is part of the wider SMC. It is located predominantly in the central and south-eastern section of the wider SMC. It extends as far south as the A5117, to Pool Lane in the east, and just beyond the railway line to the north. It is currently occupied by a laydown area in the proposed construction area with boilers and other industrial buildings to the north. The proposed temporary construction laydown area to the south is currently disused open space. The potential below ground cable trenching routes are in agricultural land off-site and adjacent to Oil Sites Road in the centre of the SMC. The three potential construction areas in the north of the site (likely used for back-up generation) are located on currently undeveloped areas with dense trees.
Access	While CHP Phase 2 site access on roadways is relatively clear, gantries cover roadways in some areas, which will limit accessible areas and should be considered during any ground investigation or construction works.
Utilities	Drainage plans were not available for review. Several drainage ditches, channels and manhole covers were noted during the walkover. Any drainage features should be taken into consideration during the planning of any ground investigation. Drainage features are considered further within the CSM.
Boundaries and Surrounding Land Uses	The majority of the boundary and surrounding land is SMC with one small part of the southern site boundary being formed by the A5117, and the east boundary being Pool Lane and the agricultural land beyond. The surrounding land in conjunction with the SMC generally consists of large industrial works including large fuel tanks, with agricultural land being present to the south and east.

Item	Information
Surface Cover	Where buildings are not present on the site the surface cover is an approximate 50:50 mix of asphalt and concrete hardstanding and compacted demolition gravel.
Topography and Elevation	The CHP Phase 2 site is approximately located at 5m Above Ordinance Datum (AOD) and is generally undulating with an overall dip towards the south.
Visual and Olfactory Evidence of Contamination	No widespread visual or olfactory evidence of any contamination was noted during the site walkover. Areas of surface staining (black oil) were noted in several parts of the CHP Phase 2 Site.
Invasive Species	No evidence of any invasive species was observed during the site walkover.

2.2 Land Use History

- 2.2.1 The wider SMC was owned and operated by Shell from 1922 until July 2011, after which EOURL has operated the site under their ownership. The SMC has gone through various stages of re-development and construction over the years. It is likely that tank contents and area usage have changed over time, and an exact timeline of site events is not available.

2.3 Historical Map Review

- 2.3.1 A copy of historical mapping as part of the Groundsure Report for the site is presented as within **Appendix C: Groundsure Report**.

Onsite

- 2.3.2 Earliest available mapping from 1897 indicates the CHP Phase 2 site was open fields with a farm track running south to north through the centre, a pond in the east, a railway way running east/west in the very north, as well as a brick-kiln in the north. It remained unchanged until mapping from the 1960s, when it was redeveloped into an oil refinery. This had a high density of associated industrial structures, tanks and infrastructure. Pool road on the eastern boundary was built. A mineral railway was shown entering the southern part of the site from the running west to east. By the late 1970s, the mineral railway had been removed but the CHP Phase 2 site was still shown to comprise many unspecified industrial buildings and tanks. By the 1990s the number of tanks and buildings onsite had decreased.

Offsite

- 2.3.3 The land surrounding the CHP Phase 2 site was similarly undeveloped in the earliest mapping, with the A5117 road that formed the southern SMC boundary constructed by approximately the late 1930s, and the wider SMC constructed during the 1950s. The wider SMC site was labelled as a 'Works' and a 'Depot' with multiple buildings and tanks being shown throughout. It was labelled as an Oil Refinery in the late 1970s, before being labelled as 'Stanlow' from the early 2000s and onwards.

2.4 Control of Major Accident Hazards

- 2.4.1 The SMC, as an establishment storing dangerous substances as specified in Schedule 1 of the Control of Major Accident Hazards (COMAH) 2015 Regulations, is subject to complying with the Regulations as an upper tier site. It is regulated by the competent authority which includes the Health and Safety Executive (HSE) and the Environment Agency (EA).

3. Existing Information Summary

3.1 WSP 2023 Report

- 3.1.1 WSP (2023) SMC, Site Protection Monitoring Programme, Dated: 30 March 2023, Ref: 70085469 (WSP,2023).
- 3.1.2 WSP previously completed a Site Protection and Monitoring Programme (SPMP) Interpretive Report for EOUKL (Ref No: 70085469-12029(1) March 2023) (WSP, 2023) for the SMC to fulfil IC35 and IC36 corrective actions to support EOUKL in satisfying its on-going reporting requirements to the EA.
- 3.1.3 The SPMP summarised and interpreted the baseline dataset obtained during the phased site investigation across the entire SMC, to establish baseline conditions on which future restoration requirements will be measured. It also detailed pollution prevention measures that were designed to protect the land at the installation are effective across the installation's life span.
- 3.1.4 The site investigation consisted of:
- Excavation of service clearance pits using handheld tools and a mechanical excavator to 1.20m bgl prior to the drilling and installation of 33no. groundwater monitoring wells to various depths ranging from 4.0m bgl to 22.0m bgl.
 - Scheduling of 44no. soil sample, 47no. groundwater samples and 1no. aged oil profile on a sample of light nonaqueous phase liquid (LNAPL).

Hazardous Substances stored in the vicinity of the site

- 3.1.5 As part of the SPMP a map of the wider SMC showing which hazardous substances were stored was created. A 'Potential Hazardous Substances' figure detailing these substances is presented in **Appendix G: Potential Sources of Contamination**. The substances stored within the vicinity of the Proposed Development and the potential chemical contaminant associated with that substance is summarised in **Table 2** below and shown in full in **Appendix G: Potential Sources of Contamination**.

Table 2 Hazardous substances

Substance	Chemical Contaminant
Liquid Petroleum Gas (LPG)	Petroleum Hydrocarbons
Crude (and associated portions/slops and slurry)	Petroleum Hydrocarbons
Kerosene	Petroleum Hydrocarbons
Naptha	Petroleum Hydrocarbons and Polyaromatic Hydrocarbons (PAH) compounds
Benzene, Ethylbenene, C5, C6, and Toluene's	Petroleum Hydrocarbons and Volatile Organic Compounds (VOCs)
Alcohols (i.e., Neodol)	Alcohols and Acetates
Gas Oil, Gasoline and Flushing Oil, Mogas (motor gasoline), Cat Cracked Gasoline, and Hydrotreated Heavy Cat Cracked Gasoline	Petroleum Hydrocarbons
Polymers	Semi-Volatile Organic Compounds (SVOCs)
Butane/Propane/Ethane/Hydrogen Sulphide	Gases
Hydrofluoric Acid, Alkylate	Acids and Alkalis
Perchloroethylene (PCE)	SVOCs
Various chemicals used for bio-dispersants, water recirculation polymers, corrosion prevention chemicals etc	SVOCs, VOCs, Acids, Alkalis
Ammonia	Ammonia

Ground Conditions

- 3.1.6 The data from the SPMP indicated that Made Ground varied in its thickness and composition and are related to the SMC site uses within each specific area. Made Ground was generally recorded to be thinner (up to 0.6m thick) in areas where there has been an absence of significant development such as at the site perimeter and in roadways. Made Ground was thicker (0.6m to 2.5m thick) in areas where heavy structures, significant development, or numerous redevelopments had taken place.
- 3.1.7 Available site data indicated that superficial deposits did not form a consistent layer across the SMC Site. In the portion of the site where the CHP Phase 2 is proposed for construction, the status of superficial deposits vary from glacial till, tidal flat deposits and, in some cases a complete absence. In all applicable

boreholes that terminated deep enough, the Wilmslow Sandstone bedrock was encountered (see below paragraphs for CHP Phase 2 specific boreholes).

Groundwater Conditions

- 3.1.8 Groundwater data collected during the SPMP investigation indicated that groundwater was recorded within the following:
- Superficial Deposits – shallow groundwater within Tidal Flats and Peat (perched water recorded within Glacial Till).
 - Bedrock – deeper ground units within the Triassic Sandstone.
- 3.1.9 The Tidal Flats and Peat deposits are projected to extend underneath the northwestern portion of the CHP 2 Phase 2 Site only. The main groundwater body within the sandstone bedrock is only found in the very southwest of the site and is thought to contain a consistent groundwater unit underlying the wider SMC Site.
- 3.1.10 The various Triassic sandstone formations underlying SMC are all classified as Principal Aquifers. Principal Aquifers are generally considered to have high intergranular and/or fracture permeability; meaning they usually provides a high level of water storage and may support water supply and/or river baseflow. The Triassic Sandstone is an important regional resource for water supply with numerous groundwater abstractions located in the wider area and within the SMC Site itself.
- 3.1.11 Several active bedrock abstraction boreholes which provide process water for SMC influence the groundwater elevation and flow direction. WW10 is located to the immediate west of the CHP Phase 2, with WW11 being located immediately northwest, and WW8 being within the eastern portion. The piezometric contours that were calculated for the SPMP reflect cones of depressions within bedrock that are visible around the active abstraction boreholes. Drawdown was relatively localised, and groundwater flowed radially into these cones of depression from the surrounding aquifer. The groundwater underlying the CHP Phase 2 when calculated for the SPMP was shown flowing inwards towards abstraction borehole WW10 offsite to the west. If the abstractions were not in use at SMC, then groundwater would be expected to flow north/northwest towards the River Mersey, and the sandstone bedrock aquifers are expected to discharge to the River Mersey on a regional scale.

Data from SPMP Boreholes/Monitoring Wells near proposed CHP Phase 2

- 3.1.12 The nearest monitoring wells, which were drilled by WSP in 2021/2022 are BC103 (drilled in the north), BC106 (southwestern boundary), BH125 (western extent), BH124 (western extent), BH127D/BH127S (very eastern portion), BC104AD/BC104AS (very western boundary), and BH107 (approximately 100m west). Other wells with no data available data are MW04-26(S&D) (centrally),

WP03 (the very northeastern portion), WP01 (very southeast), and BH08 (approximately 100m east) (no data available). **Plate 1** shows the location of these boreholes/ monitoring wells compared to the Red Line Boundary for the CHP Phase 2.

- 3.1.13 BC103 – recorded Made Ground to 1.60m bgl, underlain by Tidal Flats Deposits to 7.00m bgl (base of hole), with a layer of peat from 2.70m to 4.35m bgl.
- 3.1.14 BC106 – recorded Made Ground to 0.50m bgl underlain by Glacial Till to 5.75m bgl where Sandstone bedrock was encountered.
- 3.1.15 BC125 – recorded Made Ground to 0.50m bgl underlain by Glacial Till to 2.00m bgl where Sandstone bedrock was encountered.
- 3.1.16 BC124 – recorded Made Ground to 1.20m bgl before encountering sandstone bedrock.
- 3.1.17 BC127D/BC127S – recorded Made Ground to 0.65m bgl before encountering sandstone bedrock.
- 3.1.18 BC104AD/BC104AS – recorded Made Ground to 1.40m bgl underlain by Tidal Flat Deposits to 2.80m bgl, then peat to 4.00m bgl, before encountering Sandstone bedrock beyond
- 3.1.19 BC107 - recorded Made Ground to 0.70m bgl underlain by Glacial Till until termination at 6.00m bgl.
- 3.1.20 Resting groundwater elevations within the installed wells observed groundwater within the Wilmslow Sandstone bedrock within BC104D/S, BC106, BH124, BC125, BH127.

Plate 1 Relevant SPMP Boreholes/ Monitoring Wells



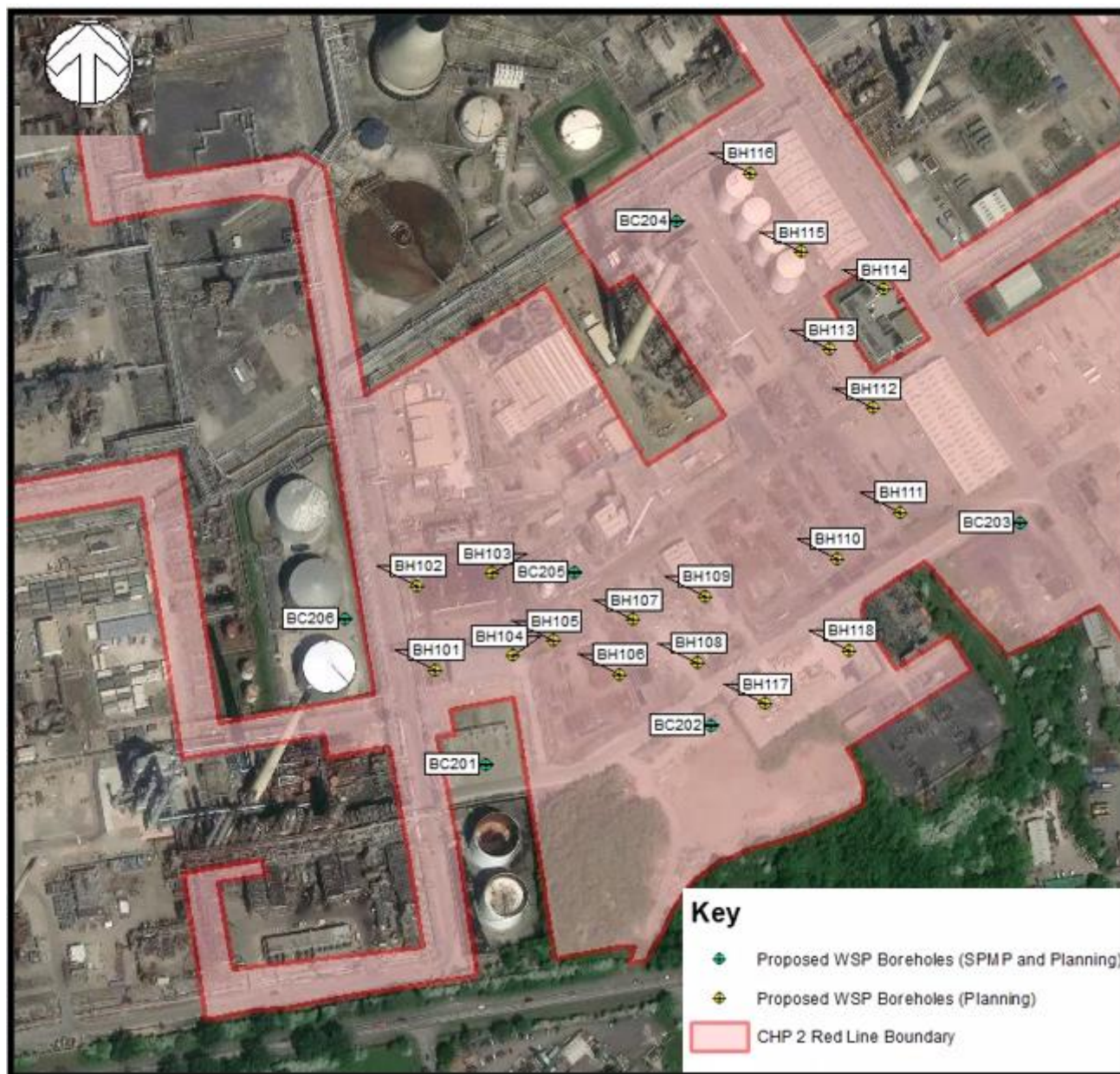
3.1.21 Groundwater sample analytical results recorded notable concentrations as follows:

- Elevated hydrocarbons when compared to other wells across the SMC Site as follows:
 - BC103 which recorded solvent odours and concentrations of benzene 50,900µg/l in Round 1 and 59,600µg/l in Round 2.
 - BC106 which recorded concentrations of mixed aliphatic and aromatics of 4200µg/l in Round 1 and 4910µg/l in Round 2.
 - BC127D which recorded concentrations of short chain aliphatic of 1820µg/l in Round 2.
- Notably elevated arsenic in BC106 (33.9µg/l and 33.6µg/l) when compared to the other wells across the Phase 2 Development boundary.
- Detectable concentrations of PFOS (perfluorooctane sulfonic acid) and PFOA (Perfluorooctanoic acid) within all applicable boreholes.
- LNAPL was detected in WP01: 0.087m thick, the laboratory interpreted this as weathered diesel. No age provided. This well was located on the perimeter

of the SMC Site and had no obvious source of diesel recorded within its vicinity.

- 3.1.22 In 2025 additional boreholes were drilled for the CHP 1 area which overlaps with the CHP 2 area. **Plate 2** shows the location of these, and a description of the logs is provided below.

Plate 2 Relevant CHP 1 Boreholes/ Monitoring Wells



- 3.1.23 Borehole log descriptions:

- BC201 – recorded Made Ground to 0.60m bgl, underlain directly by weathered sandstone/Chester Formation to 12.00m bgl (the maximum depth).

- BC202 – recorded Made Ground to 4.50m bgl, underlain by Glacial Till to 7.01m bgl further underlain by bedrock of the Chester Formation to 13.50m bgl (the maximum depth).
- BC203 – recorded Made Ground to 0.25m bgl, underlain by weathered sandstone / Chester Formation to 12.0m bgl (the maximum depth).
- BC204 – recorded Made Ground to 0.75m bgl, underlain by Alluvium to 4.31m bgl, underlain by weathered sandstone / Chester Formation to 12.00m bgl (the maximum depth).
- BC205 – recorded Made Ground to 3.00m bgl, underlain by the Chester Formation to 12.00m bgl (the maximum depth).
- BC206 – recorded Made Ground to 1.20m bgl, underlain by the Chester Formation to 12.00m bgl (the maximum depth).
- BH101 – recorded Made Ground to 0.25m bgl, underlain by the Chester Formation to 12.00m bgl (the maximum depth).
- BH102 – recorded Made Ground to 0.45m bgl, underlain by weathered sandstone / Chester Formation to 12.0m bgl (the maximum depth).
- BH103 – recorded Made Ground to 1.20m bgl, underlain by the Chester Formation to 12.00m bgl (the maximum depth).
- BH104 – recorded Made Ground to 1.20m bgl, underlain by the Chester Formation to 12.00m bgl (the maximum depth).
- BH105 – recorded Made Ground to 1.10m bgl, underlain by the Chester Formation to 12.00m bgl (the maximum depth).
- BH106 - recorded Made Ground to 0.80m bgl, underlain by the Chester Formation to 12.00m bgl (the maximum depth).
- BH107 – recorded Made Ground to 1.10m bgl, underlain by Glacial Till to 4.15m bgl, underlain by weathered sandstone / Chester Formation to 12.00m bgl (the maximum depth).
- BH108 - recorded Made Ground to 1.75m bgl, underlain by Glacial Till to 3.00m bgl, underlain by weathered sandstone / Chester Formation to 12.00m bgl (the maximum depth).
- BH109 - recorded Made Ground to 0.50m bgl, underlain by Alluvium to 2.20m bgl, underlain by Glacial Till to 2.96m bgl, underlain by weathered sandstone / Chester Formation to 12.00m bgl (the maximum depth).
- BH110 – recorded Made Ground to 1.70m bgl, underlain by Alluvium to 7.21m bgl, underlain by the Chester Formation to 13.50m bgl.

- BH111 – no log, assumed not drilled.
- BH112 – recorded Made Ground to 0.80m bgl, underlain by weathered sandstone / Chester Formation to 12.00m bgl (the maximum depth).
- BH113 – recorded Made Ground to 3.00m bgl (a zone of core loss extended to 5.60m bgl), Alluvium and Peat were recorded from 5.60 to 9.00mbgl where sandstone was recorded to 12.00m bgl.
- BH114 - recorded Made Ground to 1.20m bgl, underlain by the Chester Formation to 12.00m bgl (the maximum depth).
- BH115 – recorded Made Ground to 1.00m bgl, underlain by Alluvium to 2.06m bgl, underlain by the Chester Formation to 12.00m bgl (the maximum depth).
- BH116 – recorded Made Ground to 0.80m bgl, underlain by Alluvium to 1.20m bgl (but with a zone of core loss to 2.40m bgl beneath), at 2.40m bgl weathered sandstone becoming the Chester Formation is recorded to 12.00m bgl (the maximum depth).
- BC117 - no log, assumed not drilled.
- BH118 – recorded Made Ground to 2.30m bgl, underlain by the Chester Formation to 12.00m bgl (the maximum depth).
- BH119 – recorded 0.95m bgl, underlain by Alluvium/Glacial Till to 2.50m bgl (with a zone of core loss directly beneath it to 4.63m bgl). At 4.63m bgl sandstone was recorded to 12.20m bgl (the maximum depth).

- 3.1.24 In summary the ground conditions comprise varying thicknesses of Made Ground, with superficial deposits recorded in the centre only all underlain by bedrock.
- 3.1.25 Groundwater not recorded in any of the logs during drilling and post-installation monitoring was not available at the time of writing.
- 3.1.26 The WSP 2023 report references a previous investigation in the former chlorofluoroaniline (CFA) plant area, for which no reports are available. This investigation was within the proposed Phase 2 CHP Red Line Boundary. Monitoring well MW04-26 (S&D) (shown on **Plate 1**) is believed to have been installed as part of this investigation. The investigation recorded LNAPL in several wells, which included halogenated anilines and nitrobenzenes. No further information is available on this investigation.
- 3.1.27 In 1990 the CFA plant exploded releasing 75m³ to 150m³ of LNAPL. Both this incident and a naptha release in 2010 potentially also released firefighting foam containing perfluorinated chemical (perfluorooctanoic acid - PFOA) to the ground. Anecdotal information from a contemporary ground investigation undertaken in the vicinity of the CFA plant did not record PFAS compounds. However, any

groundwater at the site could potentially contain migrated PFAS (which does not degrade like other chemicals) and therefore any groundwater analysis at the site should include PFAS within its analytical suite.

Summary

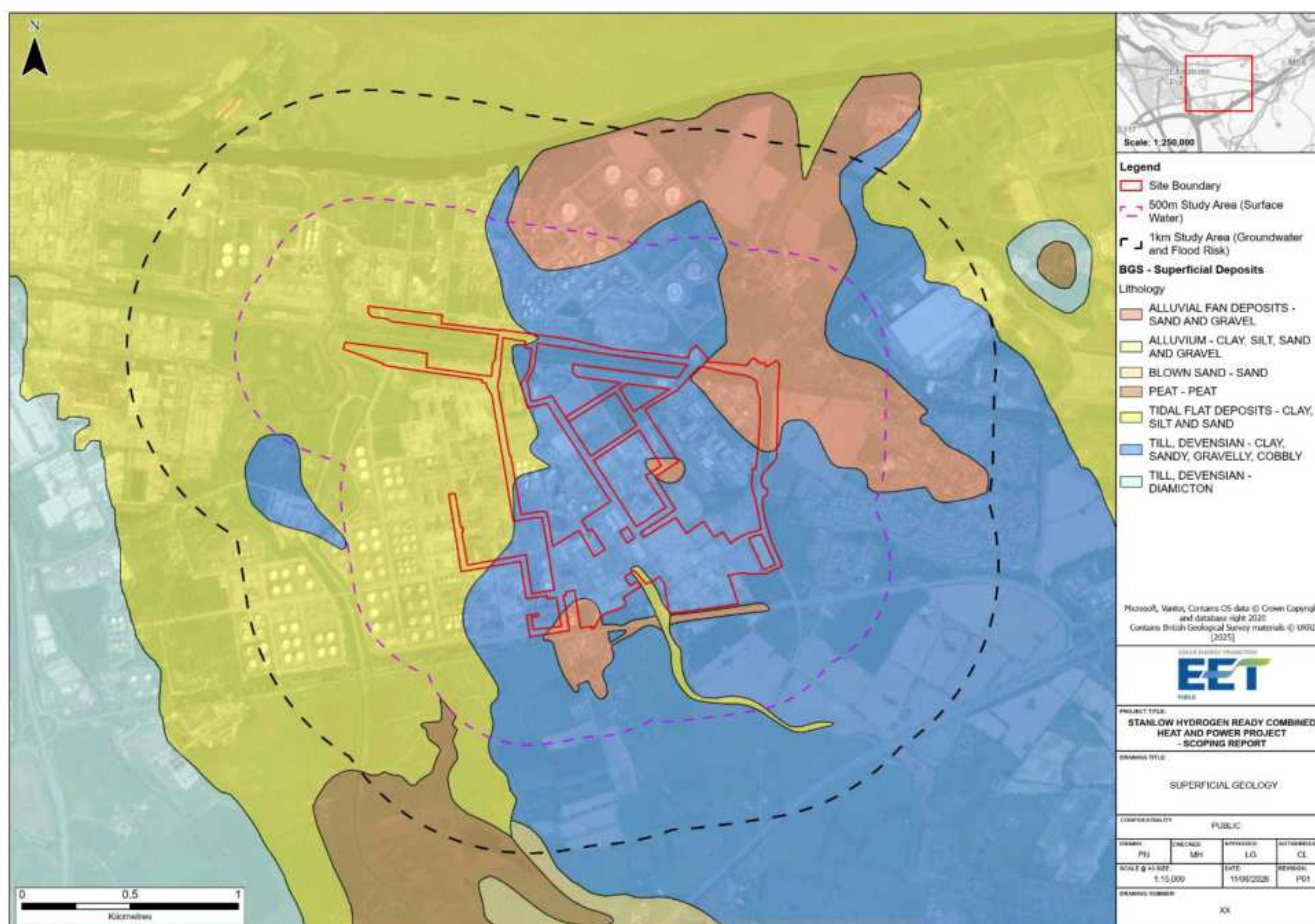
- 3.1.28 The existing information for the proposed CHP Phase 2 area and the wider SMC land indicated that a variety of potential chemical contaminant sources are present. The current understanding of the ground conditions beneath the Phase 2 CHP are that they comprise variable thicknesses of Made Ground, over Glacial Till/Tidal Flat Deposits in the central area, before being underlain by sandstone bedrock.
- 3.1.29 Perched water is expected within the Made Ground/Glacial Till with a deeper groundwater unit within the bedrock. Localised soil and potentially groundwater contamination is expected within the Site Boundary relating to previous uses of the area. The groundwater flow direction within the bedrock aquifer is dependent on the abstraction wells that are in use at that time but could also flow towards the River Mersey in the north if no abstractions are active.
- 3.1.30 Previous incidents and potential off-site sources of contamination at the wider SMC Site should be considered as they could impact the groundwater within the CHP Phase 2 Red Line Boundary.

4. Environmental Setting

4.1 Geology

4.1.1 Information extracted from the British Geological Survey (BGS) online GeoIndex viewer indicates superficial geology comprising predominantly Glacial Till (Boulder Clay consisting of red brown sandy stony clay with impersistent beds of sand) (shown in blue on **Plate 3**). Tidal Flats Deposits are present in the very northwest of the site (clay, silt and sand) with interbedded layers of Peat (shown in yellow on **Plate 3**). Alluvium is noted in the southern part of the site, in association with the Gale Brook watercourse (Gale Brook not shown, Alluvium shown in light green/yellow on **Plate 3**).

Plate 3 Superficial geology

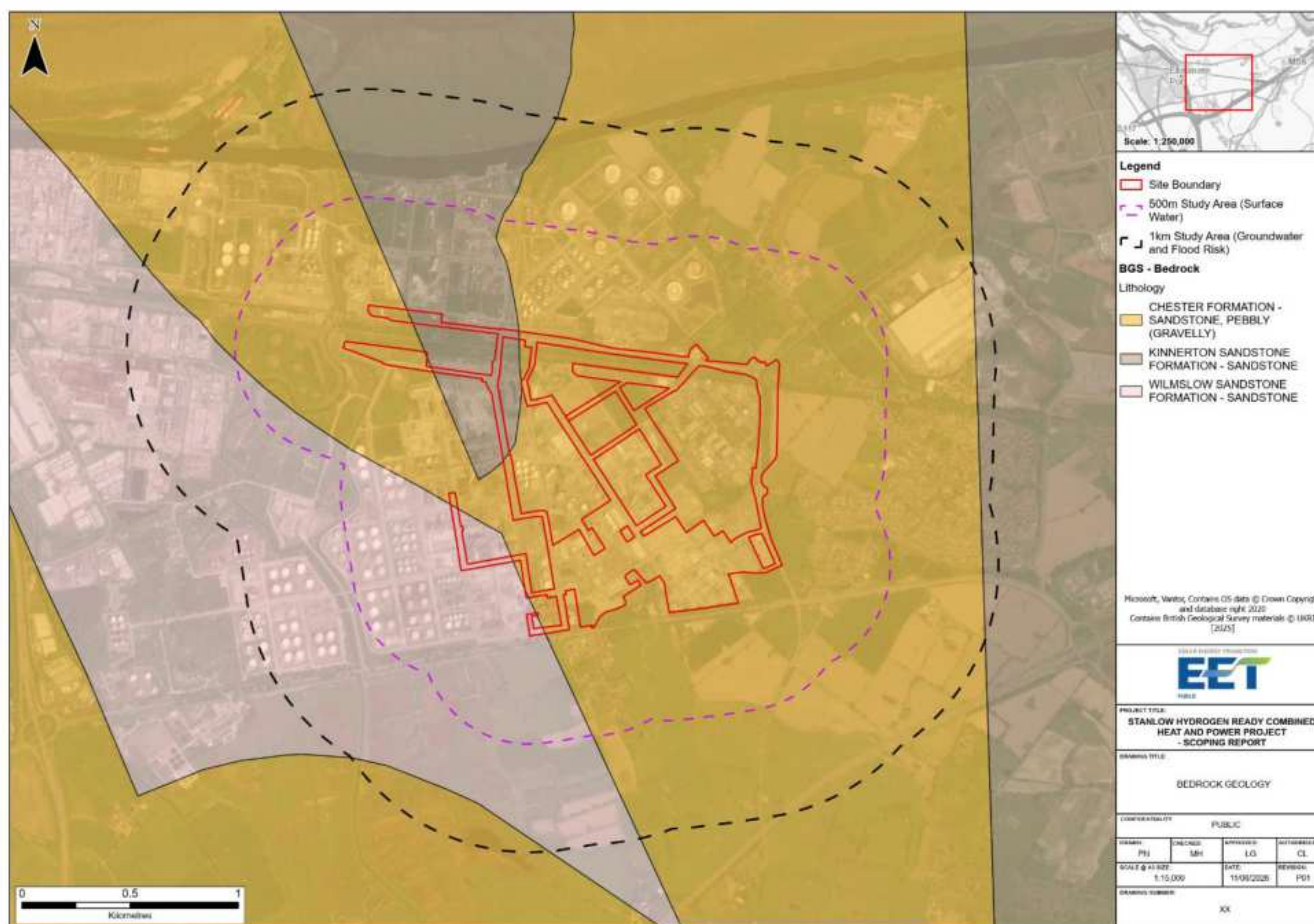


4.1.2 The majority of solid geology underlying CHP Phase 2 comprises the Chester Formation, consisting of red locally pebbly sandstones (orange on **Plate 4**). The Wilmslow Sandstone Formation is found in the very southwest of the site (pink in **Plate 4**) and consists of red brown to brick-red, fine- to medium-grained, generally

pebble-free, cross-bedded sandstones, with sporadic siltstones. In the northwest of the CHP Phase 2 Site Boundary (not shown on **Plate 4**) is the Kinnerton Sandstone (red brown to yellow, generally pebble free). A fault is recorded in the very west of the CHP Phase 2 Site Boundary, running in a north westerly direction.

- 4.1.3 Based on previous WSP works across the wider SMC site Made Ground is expected at the surface in relation to previous development at the site (as detailed in **Section 3**).

Plate 4 Solid geology



4.2 Mineral Resources

- 4.2.1 According to BGS Mapping (Cheshire, Mineral Resource Map, Scale 1:100,000) the CHP Phase 2 Red Line Boundary does not lie within a deposited mineral resource area.

4.3 Hydrogeology

- 4.3.1 The EA classifies the Glacial Till (Superficial deposits) as a Secondary (undifferentiated) Aquifer. The Alluvium found in correspondence with Gale Brook

is classified as a Secondary A Aquifer. The EA classifies all bedrock sequences as a Principal Aquifer.

- 4.3.2 The CHP Phase 2 site does not lie within a source protection zone (SPZ) and there are no SPZs recorded within 250m. A groundwater abstraction license point is located in the very east of the CHP Phase 2 boundary. A drinking water abstraction license is located approximately 250m southwest of the CHP Phase 2 Site Boundary.
- 4.3.3 Given the CHP Phase 2 site is directly underlain by a Principal Aquifer, the hydrogeological risk setting is considered to be moderate.

4.4 Hydrology

- 4.4.1 Gale Brook is the main surface watercourse noted within the CHP Phase 2 Site Boundary, which is culverted beneath the eastern portion trending in a north-west south-east direction. A man-made water catchment feature is also noted in the southwest.
- 4.4.2 In the wider hydrological setting the Manchester Ship Canal is located approximately 600m north, and the River Mersey at approximately 0.7km north.
- 4.4.3 The River Gowy, Thornton Brook and Stanney Mill Brook are surface watercourses located within the vicinity of the wider SMC; however, they are unlikely to have significant effect on the hydrological conditions within the CHP Phase 2 Site Boundary.

4.5 Coal Mining

- 4.5.1 The CHP Phase 2 Site does not lie within a Coal Mining Reporting Area. Coal mining related stability risks are therefore not considered further within this PRA Report.

4.6 Natural Ground Subsidence

- 4.6.1 Ground stability hazards identified within the Groundsure Report are summarised in **Table 3**.

Table 3 Natural ground subsidence

Stability Hazard	Risk Level
Shrink Swell Clays	Negligible to Very Low
Running Sands	Negligible to Moderate -The highest risk area is in the western part of the Site.
Compressible Deposits	Negligible to Moderate -The highest risk area is in the western part of the Site.
Collapsible Deposits	Negligible to Very Low
Landslides	Very Low
Ground Dissolution	Negligible

4.7 Flooding

4.7.1 The Groundsure Report indicates the following in relation to flooding:

Rivers/Coastal Flooding

- 4.7.2 The CHP Phase 2 Site is classified as predominantly low risk in relation to rivers and coastal flooding. The very western boundary and a small portion of the very southern boundary are indicated to be at high risk. A range of flood defences are noted to be present in the immediate vicinity of the CHP Phase 2 Site boundary in all directions.
- 4.7.3 A large portion of the western section as well as an area in correspondence with Gale Brook are indicated to be within predominately Flood Zone 3, with small portion in Flood Zone 2.
- 4.7.4 The highest risk of surface water flooding is a 1 in a 30-year period.
- 4.7.5 This summary does not constitute a Flood Risk Assessment, more details on flood risk will be in the **Volume 1, Chapter 10: Water Environment and Flood Risk**.

Groundwater Flooding

- 4.7.6 The CHP Phase 2 Site has a range of risk ratings in relation to groundwater flooding. The western and southern areas are deemed to be of high risk in relation to groundwater flooding.
- 4.7.7 A separate flood risk assessment will be prepared in relation to the CHP Phase 2 Site for submission with the DCO application, which will examine flooding in more detail.

4.8 Sensitive Land Uses

- 4.8.1 There are no recorded Sites of Special Scientific Interest (SSSIs), National Nature Reserve (NNR), Special areas of Conservation (SAC), Special Protection Area (SPA), Ancient Woodland, Local Nature Reserve (LNR) or World Heritage Sites within the Site Boundary or within 250m of the CHP Phase 2 Site.
- 4.8.2 The land to the east of Pool Lane is classified as Green Belt.

4.9 Agricultural Land Designation

- 4.9.1 The MAGIC Maps Application shows the CHP Phase 2 Site is not mapped in terms of agricultural land designation. However, given the presence of Made Ground across the SMC area of the site it is unlikely a designation would be defined for the Site.
- 4.9.2 The area within the CHP Phase 2 Red Line Boundary off-site of the SMC to the northeast where potential below ground cables are proposed is within an agricultural field that does not have a designation. The nearest designation is 1.35km east/southeast and is for Grade 3a and 3b. Grade 3 is classified as best and most versatile (BMV) soils. If the area within agricultural land is proposed for cable installation only, it would be classed as temporary and not permanent loss of agricultural land. However, an appropriate soil management and re-use strategy should be produced for these soils, which in lieu of any specific agricultural grading should assume they are potentially BMV soils.

4.10 Soil Type

- 4.10.1 Cranfield Soilscales website indicates that the expected soil types underlying the CHP Phase 2 site are predominantly loamy and clayey (slightly acid but base-rich), which are slowly permeable (impeded drainage to stream network) and seasonally wet, with moderate fertility and low carbon.
- 4.10.2 The very northeastern corner of the CHP Phase 2 Site (including the area of agricultural land outside of the SMC) is indicated to be freely draining, slightly acid sandy soils, with a low fertility and low carbon.
- 4.10.3 The very western edge of the boundary has areas that are classified as 'peaty' in nature, being loamy and sandy soils which naturally high groundwater and a peaty surface. They have a low to high fertility with medium/high carbon content.
- 4.10.4 Peat deposits have been recorded interbedded in the Tidal Flats Deposits across the wider SMC Site and there is the potential for Peat Deposits to be present within the CHP Site Boundary.

- 4.10.5 Given the industrial nature of the CHP Phase 2 Site, it is likely that in areas of development original soils have been removed and replaced with Made Ground.

4.11 Unexploded Ordnance (UXO) Hazards

- 4.11.1 A Zetica Pre-Desk Study Assessment (included in **Appendix D: UXO Preliminary Assessment**) recorded that there are no readily available records that indicate the CHP Phase 2 Site was bombed and therefore a detailed desk study is not required.

5. Preliminary Conceptual Site Model

5.1 Introduction

- 5.1.1 The potential risks associated with potential contamination within soil and groundwater are assessed according to the environmental setting / ground model, likely presence of potential sources of contamination and the proposed end use of the CHP Phase 2 Site.
- 5.1.2 The source-pathway-receptor model forms the basis of the risk assessment. Potential risks are only considered to exist if there is a credible source (e.g. a chemical substance capable of causing harm); a pathway for migration of the source to a receptor; and a sensitive receptor that could be affected (e.g. a nearby river or future site users). A source-pathway-receptor contaminant linkage assessment is termed a conceptual site model (CSM). A preliminary CSM is produced prior to intrusive ground investigation and is refined following collection of site-specific data.
- 5.1.3 For the purpose of the CSM, the site areas introduced in **Section 1.2** will be used as each has different human health and controlled waters aspects which need to be considered.

5.2 Preliminary Ground Model

- 5.2.1 The ground conditions across the Site are expected to comprise Made Ground relating to historic developments. Made Ground has been recorded in boreholes offsite around the proposed CHP Phase 2 Site Boundary.
- 5.2.2 Made Ground is expected throughout Site. Superficial deposits vary from glacial till, tidal flat deposits and, in some cases a complete absence, before being underlain by sandstone bedrock.
- 5.2.3 Perched groundwater is expected within deeper areas of superficial deposits and groundwater is expected within bedrock. Existing information indicates that groundwater within the bedrock beneath the site flows towards the west (towards abstraction well WW10). The natural groundwater flow direction is expected to be to the north towards the River Mersey, as the sandstone bedrock flows into the River Mersey on a regional scale. Groundwater flow on the site is influenced by the on-site abstraction boreholes and groundwater flow direction within the bedrock could potentially change direction depending on the boreholes that are abstracting.

- 5.2.4 The current presence of a compacted gravel surface/hardstanding across the majority of the Site would provide a degree of protection and limit the ability for surface water (rainfall) to infiltrate through the Made Ground. The low permeability clay superficial deposits (where present) will further limit vertical and lateral migration from the surface. Any contamination within the bedrock has the potential to migrate vertically and laterally within the groundwater given the fracture flow network that exists within the sandstone and the influence that abstraction(s) will have on groundwater movement.
- 5.2.5 The groundwater quality at the site is likely to reflect the industrial nature of the site/ the wider SMC Site and the accidents/incidents previously discussed.

5.3 Sources, Pathways and Receptors

- 5.3.1 The potential sources of contamination and relevant receptors to the Proposed Development and the potential exposure pathways have been identified and are presented below.

5.4 Potential Contamination Sources

- 5.4.1 Relevant potential contamination sources both from within the Phase 2 Site Boundary and from across the wider SMC include:
- Contaminants within Made Ground/ shallow soils/ shallow bedrock material associated with current / previous on-site uses, potentially including asbestos (Made Ground only). Potential chemical contaminants could include metals, PAH compounds, petroleum hydrocarbons, volatile and semi-volatile organic compounds, alcohols and acetates, acids and alkalis, phenols, polychlorinated biphenyls (PCBs) and per- and polyfluoroalkyl substances (PFAS).
 - Dissolved phase and free-phase contamination within groundwater relating to current or previous site use or that migrated from off-site.
 - Hazardous ground gas associated with Made Ground.
 - Hazardous vapours associated with volatile contamination within soil and/or groundwater.
 - In construction compounds only – spills or leaks from construction vehicles during construction.

5.5 Potential Receptors

5.5.1 Relevant potential receptors for each of the 4 site areas are summarised in **Table 4**.

Table 4 Summary of potential receptors

Receptor	Construction Areas	Below Ground Cable Areas	Laydown Areas and Construction Compounds	Above Ground Cables and Access Roads
Construction workers during the redevelopment.	✓	✓	x	x
Future site users.	✓	x	x	x
Neighbouring site users during the redevelopment.	✓	x	x	x
Third parties during and after the redevelopment.	✓	x	x	x
Perched Groundwater in Superficial Deposits (Secondary Undifferentiated and Secondary A Aquifers).	✓	✓	✓	x
Groundwater in bedrock (Principal Aquifer).	✓	✓	✓	x
Surface water/culvert water in the Gale Brook.	✓	✓	✓	x
New and existing below ground infrastructure.	✓	✓	✓	x
A groundwater abstraction license point (on-site) and drinking water abstraction license (off-site).	✓	✓	✓	x

5.6 Potential Exposure Pathways

5.6.1 Relevant potential pathways for each of the 4 site areas are summarised in **Table 5**.

Table 5 Summary of potential pathways

Pathway	Construction Areas	Below Ground Cable Areas	Laydown Areas and Construction Compounds	Above Ground Cables and Access Roads
Direct contact, ingestion and inhalation of soil bound contaminants/dust/fibres during construction work.	✓	✓	x	x
Inhalation of hazardous ground gas/vapours (relating to Made Ground / soil or groundwater contaminant sources) into any deeper excavations (if proposed) during redevelopment or migration into the future Phase 2 CHP buildings.	✓	✓	x	x
Vertical migration of mobile contaminants into superficial and bedrock aquifer.	✓	✓	✓	x
Lateral migration or baseflow of mobile contaminants into Gale Brook (potentially carried off site).	✓	✓	✓	x

5.6.2 *N.B. It is assumed that the Proposed Development will be entirely building cover and hardstanding, and that no soft landscaping will be included. Therefore, no direct contact pathway is considered to be present post-development.*

5.7 Potentially Complete Pollutant Linkages

- 5.7.1 Given the above sources, pathways and receptors the pollutant linkages that are considered to be viable are presented in **Table 6** to **Table 8**. As there are no viable pathways or receptors in the above ground cables and access roads site area this has been excluded from further assessment.
- 5.7.2 The definitions for the qualitative risk assessment have been taken from the Guidance for the Safe Development of Housing on Land Affected by Contamination (NHBC *et al.*, 2008) and included as **Appendix F: CIRIA C552**.

Table 6 Potentially complete pollutant linkages (construction areas)

Source	Pathway	Receptor	Likelihood	Severity	Qualitative Comment	Risk Likelihood
Contamination, including asbestos (Made Ground only) associated with Made Ground/shallow soils/shallow bedrock from previous land use on and offsite. Contamination relating to industrial uses (e.g. spills, leaks). Vapours from soil contamination.	Direct contact, ingestion or inhalation	Construction workers during development / neighbouring site users	Likely	Mild	There is potential for soil chemical contamination including asbestos relating to historical site use. The potential for exposure during redevelopment works can potentially be mitigated via good practice and the use of standard Personal Protective Equipment (PPE), Respiratory Protective Equipment (RPE) and good hygiene practices.	Moderate - Low
		Maintenance workers post development	Low	Mild	Any landscaped area (if proposed – it assumed there would be none) post development would require imported clean soils. If residual contamination is recorded within below hardstanding that may be disturbed post-development during any maintenance works. Then the site Health & Safety (H&S) file should document this so contractors/maintenance workers can use appropriate PPE/RPE to mitigate potential exposure during any short-term groundworks.	Low

Source	Pathway	Receptor	Likelihood	Severity	Qualitative Comment	Risk Likelihood
		Future Site Users (Commercial Receptors) Infrastructure	Low	Mild	It is assumed upon redevelopment the site will comprise 100% building footprint and hardstanding. The potential for direct contact, ingestion or inhalation is therefore likely to be negligible. Any ground investigation should assess for residual soil contamination that could pose a risk of vapour intrusion into the proposed building and determine if remediation or mitigation is required.	Low
	Mobilisation of contamination into groundwater/ surface water	Groundwater Within bedrock Surface water in Gale Brook.	High	Mild	The presence of the current site wide hardstanding will potentially have limited surface water infiltration and vertical migration of contamination into the shallow soils and / or bedrock aquifer. A ground investigation will assess groundwater and surface water quality and a robust Code of Construction Practice (CoCP) should be in place for any gross contamination encountered during the construction works. If a piled foundation solution is recommended, then an appropriate piling risk assessment will be required.	Moderate
Dissolved phase or free-phase groundwater contamination relating to previous use or that has migrated from off-site.	Migration of groundwater within the superficial deposits / bedrock					
Hazardous ground gas related to Made Ground.	Migration into ground excavations/ man-hole chambers or	Construction workers during development /	Low	Mild	There is likely a thickness of Made Ground which could potentially generate ground gas. Any ground investigation should include for ground gas monitoring to further refine this risk and recommend if	Low

Source	Pathway	Receptor	Likelihood	Severity	Qualitative Comment	Risk Likelihood
Volatile contamination in groundwater causing vapour migration.	the newly constructed buildings	neighbouring site users			mitigation measures are required. Ground investigation should also assess for the potential presence of volatile groundwater contamination/ non-aqueous phase liquid (NAPL). As is standard practice any excavations/trenches during construction should be gas tested prior to entry.	
		Maintenance workers post development	Low	Mild		
		Future Site Users (Commercial Receptors)/ Infrastructure	Low	Mild		

Table 7 Potentially complete pollutant linkages (below ground cable areas)

Source	Pathway	Receptor	Likelihood	Severity	Qualitative Comment	risk likelihood
Contamination (including asbestos (Made Ground only)) associated with Made Ground/shallow soils/shallow bedrock from previous land use on and offsite. Contamination relating to industrial uses (e.g. spills, leaks).	Direct contact, ingestion or inhalation	Construction workers during development	Likely	Mild	There is potential for soil chemical contamination including asbestos relating to historical site use. The potential for exposure during redevelopment works can potentially be mitigated via good practice and the use of standard PPE, RPE and good hygiene practices. Ground investigation is likely to be required to satisfy planning and should include an appropriate testing to suite to establish if residual contamination is present and the likely PPE/RPE required during construction.	Moderate - Low

Source	Pathway	Receptor	Likelihood	Severity	Qualitative Comment	risk likelihood
Vapours from soil contamination.		Maintenance workers post development	Low	Mild	It is assumed the below ground cable areas will be backfilled. If any below ground maintenance is required on the cables and they are installed in areas where there is residual contamination recorded, then the site H&S file should document this so contractors/maintenance workers can use appropriate PPE/RPE to mitigate potential exposure during any short-term groundworks.	Low
	Mobilisation of contamination into groundwater/surface water	Groundwater Within bedrock Adjacent Surface waters	High	Mild	The presence of the current site wide hardstanding will potentially have limited surface water infiltration and vertical migration of contamination into the shallow soils and / or bedrock aquifer. A ground investigation will assess groundwater and surface water quality.	Moderate
Dissolved phase or free-phase groundwater contamination relating to previous use or that has migrated from off-site.	Migration of groundwater within the superficial deposits / bedrock				The below ground cable trenches could act as a pathway if shallow perched water is present and they intersect any residual contamination. Any ground investigation should assess the potential for contamination along the cable routes and a robust CoCP should be in place for any gross contamination encountered during the construction works.	

Source	Pathway	Receptor	Likelihood	Severity	Qualitative Comment	risk likelihood
Hazardous ground gas related to Made Ground. Volatile contamination in groundwater causing vapour migration.	Migration into ground excavations/ man-hole chambers or the newly constructed buildings	Construction workers during development / neighbouring site users	Low	Mild	There is likely a thickness of Made Ground which could potentially generate ground gas which could migrate along the cable trenches. Any ground investigation should include for ground gas monitoring to further refine this risk and recommend if mitigation measures are required.	Low
		Maintenance workers post development	Low	Mild	Ground investigation should also assess for the potential presence of volatile groundwater contamination/NAPL. As is standard practice any excavations/trenches during construction should be gas tested prior to entry.	
		Future Site Users (Commercial Receptors)/ Infrastructure	Low	Mild		

Table 8 Potentially complete pollutant linkages (laydown areas / construction compounds)

Source	Pathway	Receptor	Likelihood	Severity	Qualitative Comment	Risk Likelihood
Contamination (including asbestos (Made Ground only)) associated with Made Ground/shallow soils/shallow bedrock	Direct contact, ingestion or inhalation	Construction workers during development	Likely	Mild	The construction compounds are in undeveloped areas of the site with Made Ground at the surface and there is potential for asbestos within this Made Ground. The potential for exposure during re-development works can potentially be	Moderate - Low

Source	Pathway	Receptor	Likelihood	Severity	Qualitative Comment	Risk Likelihood
from previous land use on and offsite.					mitigated via good practice and the use of standard PPE, RPE and good hygiene practices. Shallow soil sampling is recommended to establish if the soils are the surface are asbestos free within the construction compound areas and establish if an imported cover layer (i.e. 6f2 clean cover) is required prior to parking construction vehicles, cabins and putting building materials on these areas.	
	Mobilisation of contamination into groundwater/surface water	Groundwater Within bedrock Adjacent Surface waters.	High	Mild	The presence of the current site wide gravel surfacing will potentially limit surface water infiltration and vertical migration of contamination into the shallow soils and / or bedrock aquifer. A robust CoCP should be in place that details the mitigation measures to prevent the loss of fuels during re-fuelling and the measures that should be in place should a fuel spill occur.	Moderate
Spills and leaks from construction vehicles during construction.	Migration into of groundwater within the superficial deposits/bedrock					

6. Conclusions and Recommendations

6.1 Conclusions

- 6.1.1 The CHP Phase 2 Site comprises four main areas:
1. Construction Areas.
 2. Below ground pipes and fuel lines.
 3. Construction Compounds/ Laydown Areas.
 4. Above ground cables/pipe or fuel lines and Access Roads.
- 6.1.2 The construction areas and the majority of the below ground cable routes are predominantly in the active part of the SMC Site and there are multiple potentially contaminative land uses both on the Site and immediately adjacent.
- 6.1.3 The wider SMC Site is not classified as agricultural land. However, part of the below ground cable route is within an area of agricultural land (off-site from the wider SMC) and it is recommended that a soil management plan assuming that the soils are BMV is produced, to mitigate any potential risk of soil quality deterioration during the construction works.
- 6.1.4 Made Ground is anticipated underlying part or all of the 4 site areas. Ground disturbance will not occur in Area 4 given that the area comprises only above ground works. In the other three areas it should be assumed that the Made Ground, superficial and bedrock could potentially contain contaminants of concern such as asbestos (Made Ground only), metals, PAH compounds, petroleum hydrocarbons, VOCs, SVOCs, alcohols and acetates, acids and alkalis, phenols, PCBs and PFAS. These relate to current and former uses within the CHP Phase 2 Site Boundary and immediately adjacent.
- 6.1.5 The CHP Phase 2 Site does not lie within a mineral resource area or coal mining risk area and below ground instability is classified as negligible to moderate (the moderate relates to running sands in the west).
- 6.1.6 The CHP Phase 2 Site is considered to a moderate risk to human health and have a moderate sensitivity with regards to controlled waters relating to the Principal Aquifer (bedrock) and Gale Brook, which is culverted beneath part of the boundary.
- 6.1.7 A site investigation will be required to satisfy the Local Planning Authority (LPA) and regulator/competent authority (EA) and this will provide an opportunity to use contemporary soil, groundwater and ground gas data to understand the site

conditions and ascertain if mitigation measures are required. A robust CoCP will also be required to mitigate against any previously unidentified contamination that is encountered during the construction works.

- 6.1.8 Given the complex industrial history at the Site, there is potential that soils will not be suitable for retention and will require disposal off-site. Chemical and geotechnical testing of soils will be required to determine suitability and design parameters. If materials are unsuitable for retention or the design necessitates their removal off-site waste classification testing will also be required.

6.2 Recommendations

- 6.2.1 Based on the data presented in this PRA Report, the following is recommended:

- Intrusive investigation to ascertain ground, groundwater conditions and ground gas conditions at the Site. The site investigation design should be tailored to each of the proposed area uses.
- Liaison with the LPA and the EA (as the competent authority) to agree an overall approach prior to undertaking this investigation is recommended.
- Production of a Phase 2 Ground Investigation Report and following this PRA Report a review of potential remedial options (if required). The Phase 2 Ground Investigation would also provide information for construction risk assessment and method statements (RAMS), Code of Construction Practice (CoCP), any recommendations for soil/ groundwater remediation and waste management/disposal plans.

7. References

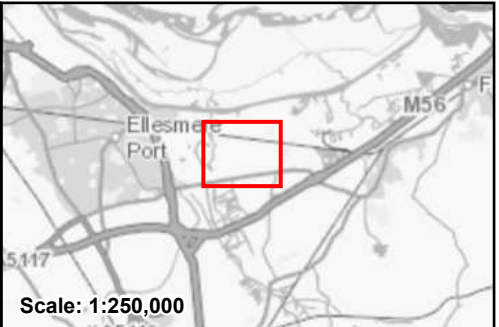
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Appendices



Appendix A – Figures



Scale: 1:250,000

Legend

Site Red Line Boundary

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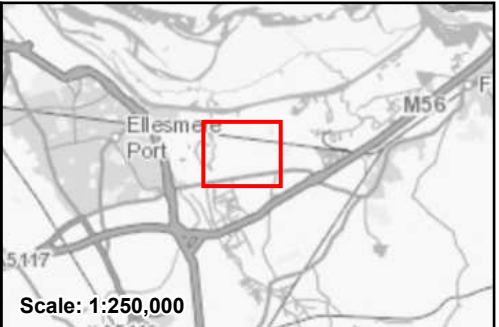


PROJECT TITLE:
**STANLOW HYDROGEN READY COMBINED
HEAT AND POWER PROJECT
- SCOPING REPORT**

DRAWING TITLE:

FIGURE 1 - SITE LOCATION PLAN

CONFIDENTIALITY		PUBLIC	
DRAWN: SB	CHECKED: MH	APPROVED: LG	AUTHORISED: CL
SCALE @ A3 SIZE: 1:7,500		DATE: 09/06/2026	REVISION: P00
DRAWING NUMBER: N/A			



- Legend**
- Site Red Line Boundary
 - Above ground cables and access roads
 - Below ground cables
 - Construction Areas
 - Laydown / construction compounds

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PROJECT TITLE:
**STANLOW HYDROGEN READY COMBINED
HEAT AND POWER PROJECT
- SCOPING REPORT**

DRAWING TITLE:
FIGURE 2- SITE AREAS

CONFIDENTIALITY		PUBLIC	
DRAWN: SB	CHECKED: MH	APPROVED: LG	AUTHORISED: CL
SCALE @ A3 SIZE: 1:7,500		DATE: 10/06/2026	REVISION: P00
DRAWING NUMBER: N/A			

Appendix B – Site Walkover Photographs



Photo 1: Southern section

wsp



Photo 2: Southern section

wsp



Photo 3: Storage on site

wsp



Photo 4: Infrastructure on site

wsp

Appendix C – Groundsure Report

Stanlow Refinery, Ellesmere Port, CH65 4HB

Order Details

Date: 28/04/2026
Your ref: R141812UK001
Our Ref: WSP-5TH-X41-GYO-JOL

Site Details

Location: 344362 375541
Area: 145.81 ha
Authority: [Cheshire West and Chester Council](#) ↗

Site plan



Quick Links

Summary of findings [p. 2](#) >
OS MasterMap site plan N/A: >10ha
Aerial image [p. 9](#) >

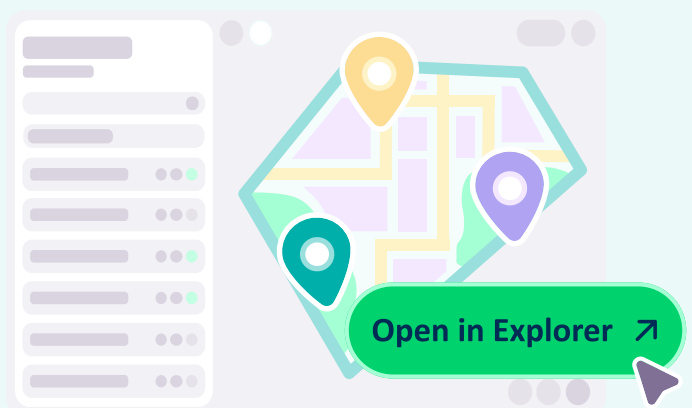
[Insight User Guide](#) ↗

Open this site in Explorer!

Access the data now in our interactive workspace.

- Map and interpret 130+ datasets across 170 years
- Generate insights and visuals quickly
- Revisit and collaborate with your team

Access to Groundsure Explorer requires an Insights account.
12 months access begins at purchase.



Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
14 >	1.1 >	Historical industrial land uses >	144	58	132	172	-
33 >	1.2 >	Historical tanks >	266	86	250	429	-
70 >	1.3 >	Historical energy features >	10	5	7	22	-
72 >	1.4 >	Historical petrol stations >	0	0	0	1	-
72 >	1.5 >	Historical garages >	0	0	2	0	-
73	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped >	On site	0-50m	50-250m	250-500m	500-2000m
74 >	2.1 >	Historical industrial land uses >	185	73	184	224	-
98 >	2.2 >	Historical tanks >	417	119	314	557	-
149 >	2.3 >	Historical energy features >	16	7	12	29	-
151 >	2.4 >	Historical petrol stations >	0	0	0	1	-
152 >	2.5 >	Historical garages >	0	0	3	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
153	3.1	Active or recent landfill	0	0	0	0	-
153	3.2	Historical landfill (BGS records)	0	0	0	0	-
154	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
154 >	3.4 >	Historical landfill (EA/NRW records) >	0	0	2	1	-
155 >	3.5 >	Historical waste sites >	2	0	0	1	-
155 >	3.6 >	Licensed waste sites >	0	0	0	2	-
156 >	3.7 >	Waste exemptions >	26	0	7	91	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
167 >	4.1 >	Recent industrial land uses >	57	18	52	-	-
175 >	4.2 >	National Geographic Database (NGD) - Current or recent tanks >	116	76	196	-	-
189 >	4.3 >	Current or recent petrol stations >	0	0	0	1	-
189 >	4.4 >	Electricity cables >	0	1	0	2	-
189	4.5	Gas pipelines	0	0	0	0	-



190	4.6	Sites determined as Contaminated Land	0	0	0	0	-
190 >	4.7 >	Control of Major Accident Hazards (COMAH) >	8	0	1	2	-
191	4.8	Regulated explosive sites	0	0	0	0	-
191 >	4.9 >	Hazardous substance storage/usage >	6	11	6	5	-
195 >	4.10 >	Historical licensed industrial activities (IPC) >	32	0	0	43	-
204 >	4.11 >	Licensed industrial activities (Part A(1)) >	128	0	25	0	-
227 >	4.12 >	Licensed pollutant release (Part A(2)/B) >	0	0	1	3	-
228 >	4.13 >	Radioactive Substance Authorisations >	4	0	0	0	-
229 >	4.14 >	Licensed Discharges to controlled waters >	20	0	10	42	-
239	4.15	Pollutant release to surface waters (Red List)	0	0	0	0	-
240	4.16	Pollutant release to public sewer	0	0	0	0	-
240	4.17	List 1 Dangerous Substances	0	0	0	0	-
240 >	4.18 >	List 2 Dangerous Substances >	4	0	1	3	-
241 >	4.19 >	Pollution Incidents (EA/NRW) >	1	0	3	3	-
242 >	4.20 >	Pollution inventory substances >	36	2	0	0	-
253 >	4.21 >	Pollution inventory waste transfers >	1	1	0	0	-
258	4.22	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology >	On site	0-50m	50-250m	250-500m	500-2000m
259 >	5.1 >	Superficial aquifer >	Identified (within 500m)				
261 >	5.2 >	Bedrock aquifer >	Identified (within 500m)				
263 >	5.3 >	Groundwater vulnerability >	Identified (within 50m)				
267	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
267	5.5	Groundwater vulnerability- local information	None (within 0m)				
268 >	5.6 >	Groundwater abstractions >	6	0	0	23	7
278 >	5.7 >	Surface water abstractions >	0	0	1	2	31
286 >	5.8 >	Potable abstractions >	1	0	0	4	0
287	5.9	Source Protection Zones	0	0	0	0	-
288	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology >	On site	0-50m	50-250m	250-500m	500-2000m



289 >	6.1 >	Water Network (OS NGD) >	35	37	154	-	-
307 >	6.2 >	Surface water features >	1	20	93	-	-
307 >	6.3 >	WFD Surface water body catchments >	2	-	-	-	-
308 >	6.4 >	WFD Surface water bodies >	0	1	0	-	-
308 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding >	On site	0-50m	50-250m	250-500m	500-2000m
309 >	7.1 >	Risk of flooding from rivers and the sea >	High (within 50m)				
310	7.2	Historical Flood Events	0	0	0	-	-
310 >	7.3 >	Flood Defences >	0	3	16	-	-
311 >	7.4 >	Areas Benefiting from Flood Defences >	2	0	10	-	-
312	7.5	Flood Storage Areas	0	0	0	-	-
313 >	7.6 >	Flood Zone 2 >	Identified (within 50m)				
314 >	7.7 >	Flood Zone 3 >	Identified (within 50m)				
Page	Section	Surface water flooding >					
315 >	8.1 >	Surface water flooding >	1 in 30 year, Greater than 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
317 >	9.1 >	Groundwater flooding >	High (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
318 >	10.1 >	Sites of Special Scientific Interest (SSSI) >	0	0	0	0	2
319 >	10.2 >	Conserved wetland sites (Ramsar sites) >	0	0	0	0	2
320	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
320 >	10.4 >	Special Protection Areas (SPA) >	0	0	0	0	3
321	10.5	National Nature Reserves (NNR)	0	0	0	0	0
321	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
321	10.7	Designated Ancient Woodland	0	0	0	0	0
321	10.8	Biosphere Reserves	0	0	0	0	0
322	10.9	Forest Parks	0	0	0	0	0
322	10.10	Marine Conservation Zones	0	0	0	0	0
322 >	10.11 >	Green Belt >	1	0	0	0	0



322	10.12	Proposed Ramsar sites	0	0	0	0	0
323	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
323	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
323	10.15	Nitrate Sensitive Areas	0	0	0	0	0
323 >	10.16 >	Nitrate Vulnerable Zones >	3	0	2	1	1
325 >	10.17 >	SSSI Impact Risk Zones >	3	-	-	-	-
326 >	10.18 >	SSSI Units >	0	0	0	0	4
Page	Section	Visual and cultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
330	11.1	World Heritage Sites	0	0	0	-	-
331	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
331	11.3	National Parks	0	0	0	-	-
331 >	11.4 >	Listed Buildings >	1	0	6	-	-
332 >	11.5 >	Conservation Areas >	0	1	1	-	-
332	11.6	Scheduled Ancient Monuments	0	0	0	-	-
333	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
334 >	12.1 >	Agricultural Land Classification >	Urban (within 250m)				
335	12.2	Open Access Land	0	0	0	-	-
335	12.3	Tree Felling Licences	0	0	0	-	-
335 >	12.4 >	Environmental Stewardship Schemes >	0	1	2	-	-
336 >	12.5 >	Countryside Stewardship Schemes >	2	1	3	-	-
Page	Section	Habitat designations >	On site	0-50m	50-250m	250-500m	500-2000m
337 >	13.1 >	Priority Habitat Inventory >	6	7	31	-	-
339	13.2	Habitat Networks	0	0	0	-	-
339 >	13.3 >	Open Mosaic Habitat >	4	3	4	-	-
340	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
341 >	14.1 >	10k Availability >	Identified (within 500m)				
343	14.2	Artificial and made ground (10k)	0	0	0	0	-

344 >	14.3 >	Superficial geology (10k) >	8	2	1	3	-
345	14.4	Landslip (10k)	0	0	0	0	-
346 >	14.5 >	Bedrock geology (10k) >	7	1	0	0	-
347 >	14.6 >	Bedrock faults and other linear features (10k) >	3	0	0	0	-
Page	Section	Geology 1:50,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
348 >	15.1 >	50k Availability >	Identified (within 500m)				
349	15.2	Artificial and made ground (50k)	0	0	0	0	-
349	15.3	Artificial ground permeability (50k)	0	0	-	-	-
350 >	15.4 >	Superficial geology (50k) >	5	0	2	2	-
351 >	15.5 >	Superficial permeability (50k) >	Identified (within 50m)				
352	15.6	Landslip (50k)	0	0	0	0	-
352	15.7	Landslip permeability (50k)	None (within 50m)				
353 >	15.8 >	Bedrock geology (50k) >	6	0	0	0	-
354 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
354 >	15.10 >	Bedrock faults and other linear features (50k) >	4	0	0	0	-
Page	Section	Boreholes >	On site	0-50m	50-250m	250-500m	500-2000m
356 >	16.1 >	BGS Boreholes >	27	2	9	-	-
Page	Section	Natural ground subsidence >					
359 >	17.1 >	Shrink swell clays >	Very low (within 50m)				
361 >	17.2 >	Running sands >	Moderate (within 50m)				
363 >	17.3 >	Compressible deposits >	Moderate (within 50m)				
365 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
367 >	17.5 >	Landslides >	Very low (within 50m)				
369 >	17.6 >	Ground dissolution of soluble rocks >	Negligible (within 50m)				
Page	Section	Mining and ground workings >	On site	0-50m	50-250m	250-500m	500-2000m
371	18.1	BritPits	0	0	0	0	-
372 >	18.2 >	Surface ground workings >	55	10	36	-	-
375	18.3	Underground workings	0	0	0	0	0
376	18.4	Underground mining extents	0	0	0	0	-



376	18.5	Historical Mineral Planning Areas	0	0	0	0	-
376	18.6	Non-coal mining	0	0	0	0	0
376	18.7	JPB mining areas	None (within 0m)				
376	18.8	The Coal Authority non-coal mining	0	0	0	0	-
377	18.9	Researched mining	0	0	0	0	-
377	18.10	Mining record office plans	0	0	0	0	-
377	18.11	BGS mine plans	0	0	0	0	-
377	18.12	Coal mining	None (within 0m)				
378	18.13	Brine areas	None (within 0m)				
378	18.14	Gypsum areas	None (within 0m)				
378	18.15	Tin mining	None (within 0m)				
378	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
379	19.1	Natural cavities	0	0	0	0	-
379	19.2	Mining cavities	0	0	0	0	0
379	19.3	Reported recent incidents	0	0	0	0	-
379	19.4	Historical incidents	0	0	0	0	-
Page	Section	Radon >					
381 >	20.1 >	Radon >	Less than 1% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
383 >	21.1 >	BGS Estimated Background Soil Chemistry >	70	18	-	-	-
386	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
386	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects >	On site	0-50m	50-250m	250-500m	500-2000m
387	22.1	Underground railways (London)	0	0	0	-	-
387	22.2	Underground railways (Non-London)	0	0	0	-	-
388	22.3	Railway tunnels	0	0	0	-	-
388 >	22.4 >	Historical railway and tunnel features >	29	5	11	-	-
390	22.5	Royal Mail tunnels	0	0	0	-	-



390 >	22.6 >	Historical railways >	9	1	0	-	-
390 >	22.7 >	Railways >	19	0	6	-	-
392	22.8	Crossrail 2	0	0	0	0	-
392	22.9	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 20/05/2023

Site Area: 145.81ha



Recent site history - 2020 aerial photograph



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Capture Date: 10/04/2020

Site Area: 145.81ha



Recent site history - 2010 aerial photograph



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Capture Date: 11/10/2010

Site Area: 145.81ha



Recent site history - 2005 aerial photograph



Capture Date: 15/05/2005

Site Area: 145.81ha



Recent site history - 2000 aerial photograph

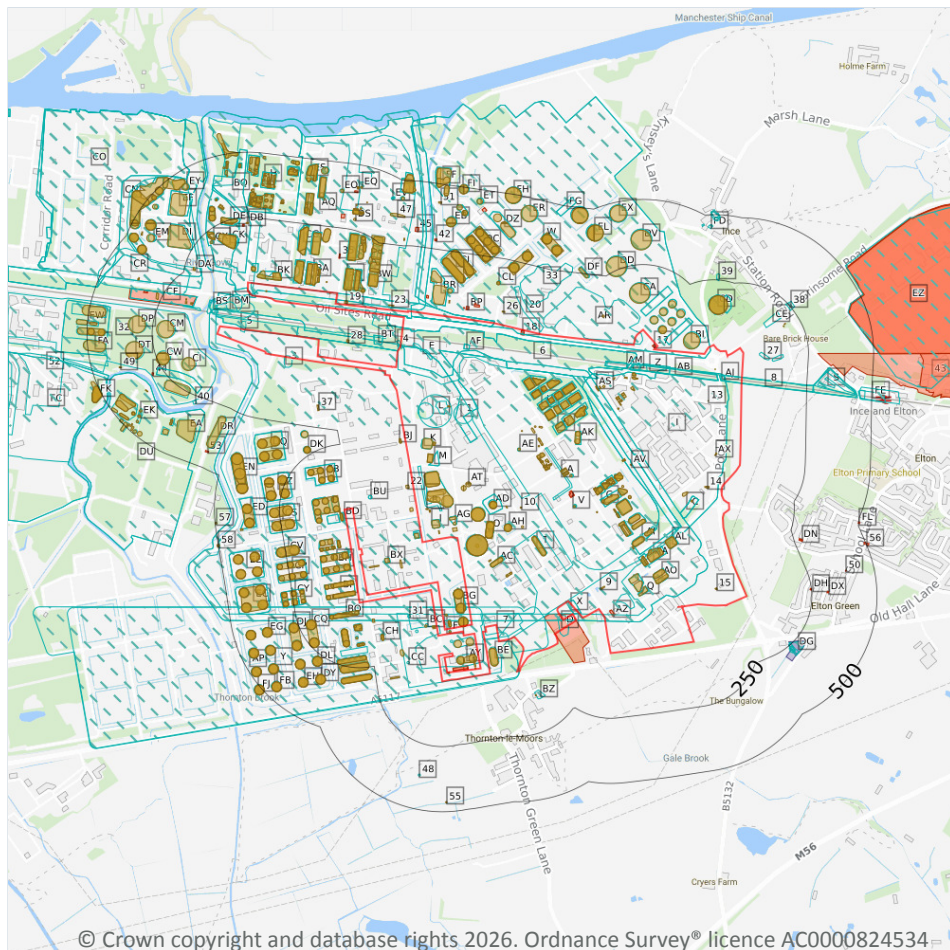


Capture Date: 21/07/2000

Site Area: 145.81ha



1 Past land use



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features
- Historical petrol stations
- Historical garages

1.1 Historical industrial land uses

Records within 500m

506

Potentially contaminative land use features digitised from historical Ordnance Survey® mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 14](#) >

ID	Location	Land use	Dates present	Group ID
1	On site	Unspecified Mill	1897	826287



ID	Location	Land use	Dates present	Group ID
2	On site	Unspecified Pit	1967	831117
3	On site	Unspecified Pit	1967	831181
4	On site	Unspecified Heap	1953	844213
5	On site	Unspecified Heap	1953	844260
6	On site	Mineral Railway Sidings	1967	909464
7	On site	Unspecified Works	1983	941641
8	On site	Cuttings	1897 - 1908	948045
A	On site	Unspecified Ground Workings	1967	816352
A	On site	Unspecified Tank	1990	947073
A	On site	Unspecified Tank	1978	978756
B	On site	Unspecified Ground Workings	1967	816353
B	On site	Oil Refinery	1978	885162
B	On site	Unspecified Tanks	1990	925123
B	On site	Unspecified Tanks	1978	925784
B	On site	Oil Refinery	1990	982211
B	On site	Unspecified Works	1967	992690
C	On site	Unspecified Pit	1978	831118
C	On site	Cuttings	1967	881562
C	On site	Cuttings	1990	897636
D	On site	Unspecified Heaps	1967	837954
E	On site	Unspecified Heap	1953	844258
E	On site	Railway Sidings	1978	910223
E	On site	Railway Sidings	1990	945182
F	On site	Unspecified Tank	1967	850284
F	On site	Unspecified Tank	1967 - 1983	930835
G	On site	Unspecified Tank	1967	851525
G	On site	Unspecified Tanks	1990	860205
G	On site	Unspecified Tanks	1978	861385



ID	Location	Land use	Dates present	Group ID
G	On site	Unspecified Tanks	1990	862052
G	On site	Unspecified Tanks	1990	876506
G	On site	Unspecified Tanks	1990	886998
G	On site	Unspecified Tanks	1978	903212
G	On site	Unspecified Tanks	1967	904056
G	On site	Unspecified Tanks	1990	916688
G	On site	Unspecified Tanks	1978	921488
G	On site	Unspecified Tanks	1967 - 1978	945929
G	On site	Unspecified Tanks	1978	967618
G	On site	Unspecified Tanks	1990	968583
G	On site	Unspecified Tanks	1978	970324
G	On site	Unspecified Tanks	1990	979676
G	On site	Unspecified Tanks	1978	981347
G	On site	Unspecified Tanks	1990	994277
G	On site	Unspecified Tanks	1967 - 1978	1003662
H	On site	Mineral Railway Sidings	1967	858663
I	On site	Research Centre	1978	859525
I	On site	Research Centre	1990	859526
J	On site	Unspecified Tanks	1978	861239
J	On site	Unspecified Tanks	1990	911688
K	On site	Unspecified Tanks	1967 - 1978	862099
K	On site	Unspecified Tanks	1990	876771
L	On site	Pumping Mill	1938	863140
L	On site	Pumping Mill	1912	894243
L	On site	Pumping Mill	1912	1009788
M	On site	Unspecified Pit	1990	864677
M	On site	Unspecified Pit	1978	925680
N	On site	Unspecified Tanks	1990	866224



ID	Location	Land use	Dates present	Group ID
N	On site	Unspecified Tanks	1967	905732
N	On site	Unspecified Tanks	1967 - 1978	966325
N	On site	Unspecified Tanks	1978	980150
N	On site	Unspecified Tanks	1990	992615
O	On site	Unspecified Tanks	1967 - 1978	866504
O	On site	Unspecified Tanks	1990	956864
P	On site	Unspecified Commercial/Industrial	1967	867150
Q	On site	Unspecified Tanks	1978	870038
Q	On site	Unspecified Tanks	1978	896503
Q	On site	Unspecified Tanks	1990	922276
Q	On site	Unspecified Tanks	1990	1000917
R	On site	Unspecified Tank	1967 - 1978	872416
R	On site	Unspecified Tank	1990	921800
S	On site	Cuttings	1949	874235
S	On site	Cuttings	1938	937581
T	On site	Unspecified Tanks	1978	874362
T	On site	Unspecified Tanks	1990	987681
U	On site	Unspecified Tanks	1967 - 1978	876263
U	On site	Unspecified Tanks	1990	907250
U	On site	Unspecified Tanks	1967 - 1978	916815
U	On site	Unspecified Tanks	1990	929637
U	On site	Unspecified Tanks	1967 - 1978	935463
U	On site	Unspecified Tanks	1967 - 1978	935623
U	On site	Unspecified Tanks	1990	947005
U	On site	Unspecified Tanks	1967 - 1978	952578
U	On site	Unspecified Tanks	1990	960824
U	On site	Unspecified Tanks	1990	965145
U	On site	Unspecified Tanks	1967 - 1978	967850



ID	Location	Land use	Dates present	Group ID
U	On site	Unspecified Tanks	1967 - 1978	973629
U	On site	Unspecified Tanks	1967 - 1978	979469
U	On site	Unspecified Tanks	1990	980081
U	On site	Unspecified Tanks	1990	982962
U	On site	Unspecified Tanks	1967 - 1978	983176
U	On site	Unspecified Tanks	1990	987329
U	On site	Unspecified Tanks	1967 - 1978	996429
U	On site	Unspecified Tanks	1990	996734
U	On site	Unspecified Tanks	1967 - 1978	998734
U	On site	Unspecified Tanks	1990	999865
U	On site	Unspecified Tanks	1990	1009800
V	On site	Unspecified Tank	1978	876408
V	On site	Unspecified Tank	1990	880550
V	On site	Unspecified Tank	1967	896790
W	On site	Unspecified Commercial/Industrial	1990	877579
W	On site	Unspecified Commercial/Industrial	1978	977550
X	On site	Unspecified Pit	1967 - 1978	879083
X	On site	Unspecified Pit	1990	983026
Y	On site	Unspecified Depot	1967	879945
Z	On site	Cuttings	1967 - 1978	880923
Z	On site	Cuttings	1990	887451
AA	On site	Unspecified Tanks	1990	880934
AA	On site	Unspecified Tanks	1978	929347
AB	On site	Cuttings	1953	885045
AB	On site	Cuttings	1897	961005
AB	On site	Cuttings	1908 - 1938	973354
AC	On site	Unspecified Tanks	1978	886866
AC	On site	Unspecified Tanks	1990	946684



ID	Location	Land use	Dates present	Group ID
AD	On site	Unspecified Heap	1990	896536
AD	On site	Unspecified Heap	1967 - 1978	967741
AD	On site	Unspecified Tank	1967 - 1978	989000
AD	On site	Unspecified Tank	1990	992422
AE	On site	Unspecified Tank	1990	898790
AE	On site	Unspecified Tank	1967 - 1978	974133
AF	On site	Railway Station	1990	900029
AF	On site	Railway Station	1967 - 1978	973504
AG	On site	Unspecified Tanks	1978	903472
AG	On site	Unspecified Tanks	1990	944579
AH	On site	Unspecified Tank	1990	903493
AH	On site	Unspecified Tank	1967 - 1978	1008653
AI	On site	Unspecified Tanks	1990	903694
AI	On site	Unspecified Tanks	1978	971472
AJ	On site	Cuttings	1953	906474
AK	On site	Unspecified Tanks	1978	909490
AK	On site	Unspecified Tanks	1990	917048
AL	On site	Unspecified Tanks	1990	915905
AL	On site	Unspecified Tanks	1978	972965
AM	On site	Cuttings	1908 - 1938	922696
AM	On site	Cuttings	1938	941275
AM	On site	Cuttings	1908	963759
AM	On site	Cuttings	1953	989569
AN	On site	Unspecified Tank	1967 - 1978	941564
AN	On site	Unspecified Tank	1990	1007837
AO	On site	Unspecified Tanks	1990	950552
AO	On site	Unspecified Tanks	1978	993772
AP	On site	Unspecified Depot	1983	958333



ID	Location	Land use	Dates present	Group ID
AQ	On site	Unspecified Commercial/Industrial	1978	967698
AQ	On site	Unspecified Commercial/Industrial	1990	989346
AR	On site	Unspecified Heaps	1967 - 1978	971237
BB	4m W	Unspecified Tanks	1990	964295
BB	4m W	Unspecified Tanks	1978	995256
F	6m W	Unspecified Tanks	1967	819454
BD	6m W	Unspecified Tanks	1978	912714
BD	6m W	Unspecified Tanks	1990	958087
AY	8m W	Unspecified Tanks	1967	819456
20	9m N	Unspecified Heap	1967 - 1978	917792
F	9m N	Unspecified Tanks	1967 - 1983	977250
BB	9m W	Unspecified Tanks	1967	1002523
BF	10m W	Unspecified Tanks	1967 - 1978	896928
BF	10m W	Unspecified Tanks	1990	941445
BE	12m E	Unspecified Tanks	1983	819857
BG	12m W	Unspecified Tanks	1967 - 1978	864141
BG	12m W	Unspecified Tanks	1990	916073
BH	13m W	Unspecified Tanks	1990	978569
BH	13m W	Unspecified Tanks	1967 - 1978	994160
F	13m E	Unspecified Tank	1983	850287
BD	13m W	Unspecified Tanks	1967	894144
BI	17m N	Unspecified Tank	1990	908199
BI	17m N	Unspecified Tank	1978	974135
BA	18m N	Unspecified Tanks	1967 - 1978	889275
BA	18m N	Unspecified Tanks	1990	915774
BA	19m N	Unspecified Tanks	1967 - 1978	977552
BD	20m W	Unspecified Tanks	1990	896826
BD	20m W	Unspecified Tanks	1967 - 1978	954377



ID	Location	Land use	Dates present	Group ID
BA	22m N	Unspecified Tanks	1990	912023
BL	23m N	Cuttings	1978	943632
BL	23m N	Cuttings	1990	971762
BK	24m N	Unspecified Tanks	1967	954159
BK	25m N	Unspecified Tanks	1990	938671
BK	25m N	Unspecified Tanks	1978	961835
F	25m S	Chimney	1983	853222
BD	26m W	Unspecified Pit	1978	899249
BD	26m W	Unspecified Pit	1990	912948
25	28m W	Unspecified Heap	1953	844259
BM	29m SW	Unspecified Old Wharf	1938	937123
BN	29m NE	Unspecified Tanks	1967 - 1978	885184
BN	32m NE	Unspecified Tanks	1990	885975
BC	32m W	Unspecified Tank	1983	850286
BO	33m S	Unspecified Tanks	1967 - 1978	883565
BO	33m S	Unspecified Tanks	1990	972299
BQ	39m N	Railway Sidings	1978	952198
BQ	39m N	Railway Sidings	1990	957265
BR	39m N	Unspecified Tanks	1990	933105
BR	39m N	Unspecified Tanks	1978	988895
BL	40m NE	Unspecified Tank	1990	986257
BL	40m NE	Unspecified Tank	1967 - 1978	993051
BH	41m W	Unspecified Tanks	1990	953791
BH	41m W	Unspecified Tanks	1967 - 1978	1005703
BL	41m NE	Unspecified Tank	1990	860852
BL	41m NE	Unspecified Tank	1967 - 1978	940681
BO	43m S	Unspecified Tanks	1983	999037
BM	43m SW	Unspecified Old Wharf	1912	943315



ID	Location	Land use	Dates present	Group ID
BK	43m N	Unspecified Tanks	1990	869082
BK	43m N	Unspecified Tanks	1978	992027
BN	45m E	Unspecified Tanks	1990	942120
BN	45m E	Unspecified Tanks	1967 - 1978	966927
BS	48m N	Unspecified Old Wharf	1913 - 1929	975409
BL	54m N	Cuttings	1990	879890
BL	54m N	Cuttings	1978	963017
BS	55m NW	Unspecified Wharf	1894	848639
BD	57m W	Unspecified Tanks	1967 - 1978	928893
BD	57m W	Unspecified Tanks	1990	991435
BN	57m N	Unspecified Tanks	1990	904411
BN	57m N	Unspecified Tanks	1967 - 1978	928770
BN	58m N	Unspecified Tank	1990	919626
BN	58m N	Unspecified Tank	1978	942834
BN	58m N	Unspecified Tank	1967	958612
27	62m E	Unspecified Tank	1968	851440
BT	66m NW	Railway Building	1978	879486
BT	66m NW	Railway Building	1990	967373
BM	68m N	Unspecified Old Wharf	1912	958104
BH	70m W	Unspecified Tanks	1990	893698
BH	70m W	Unspecified Tanks	1967 - 1978	959920
BC	74m W	Chimney	1983	853220
BU	74m NE	Chimney	1990	936651
BU	74m NE	Chimney	1978	939911
31	79m S	Chimney	1983	853223
BV	81m S	Unspecified Tanks	1967 - 1983	948438
BW	84m N	Unspecified Tanks	1990	890534
BW	84m N	Unspecified Tanks	1967 - 1978	961314



ID	Location	Land use	Dates present	Group ID
BX	88m E	Unspecified Tanks	1967 - 1978	894859
BX	88m E	Unspecified Tanks	1990	949233
32	88m SW	Unspecified Commercial/Industrial	1967 - 1978	911971
BL	89m NE	Unspecified Tank	1978	883497
BL	89m NE	Unspecified Tank	1990	929173
BR	90m N	Unspecified Tank	1990	910011
BR	90m N	Unspecified Tank	1978	975003
BL	91m NE	Unspecified Tank	1990	889256
BL	91m NE	Unspecified Tank	1978	903325
BY	96m NW	Unspecified Old Wharf	1897	844441
BZ	100m SE	Telephone Exchange	1983	847401
CA	105m N	Unspecified Tank	1990	917952
CA	105m N	Unspecified Tank	1978	927408
33	106m N	Unspecified Heaps	1967 - 1978	885758
CB	112m N	Unspecified Tanks	1967 - 1978	869878
CB	112m N	Unspecified Tanks	1990	916194
34	112m E	Unspecified Tanks	1968	819850
BV	115m SW	Unspecified Tanks	1967 - 1983	964504
CC	115m W	Chimney	1983	853221
CD	118m N	Unspecified Tank	1967 - 1978	936830
CD	118m N	Unspecified Tank	1990	983742
CE	127m NE	Cuttings	1990	808205
CF	127m NW	Unspecified Factory	1978	865303
CF	127m NW	Unspecified Factory	1990	915682
BV	129m S	Unspecified Tank	1967 - 1983	991066
CG	130m N	Unspecified Tanks	1990	941453
CG	130m N	Unspecified Tanks	1967 - 1978	947533
CH	131m S	Unspecified Tanks	1967 - 1983	977085



ID	Location	Land use	Dates present	Group ID
CD	132m NE	Unspecified Heap	1968	894039
CD	132m NE	Unspecified Heap	1990	947086
CI	133m SW	Unspecified Tank	1978	851442
BW	133m N	Unspecified Tanks	1990	935791
BW	133m N	Unspecified Tanks	1967 - 1978	950682
BL	133m N	Unspecified Tank	1990	904520
BL	133m N	Unspecified Tank	1978	944642
CJ	136m N	Unspecified Tanks	1990	961559
CJ	136m N	Unspecified Tanks	1967 - 1978	998268
CG	137m N	Unspecified Tanks	1990	879099
CG	137m N	Unspecified Tanks	1967 - 1978	928952
BL	137m NE	Unspecified Tank	1978	927313
BL	137m NE	Unspecified Tank	1990	946619
BW	139m N	Unspecified Tanks	1967 - 1978	1006511
BW	139m N	Unspecified Tanks	1990	1006938
CK	143m N	Unspecified Tanks	1967	903866
CK	145m N	Unspecified Tanks	1978	895466
CK	145m N	Unspecified Tanks	1990	978422
CL	150m N	Unspecified Tank	1978	896941
CL	150m N	Unspecified Tank	1990	961503
BV	152m S	Unspecified Tanks	1967 - 1983	983993
BW	157m NE	Unspecified Tank	1967 - 1978	983429
BW	157m NE	Unspecified Tank	1990	1005653
CM	162m W	Unspecified Tank	1978	851467
CN	164m NW	Unspecified Commercial/Industrial	1990	872159
CN	164m NW	Unspecified Commercial/Industrial	1978	909867
BV	171m S	Unspecified Pit	1967 - 1983	995981
CN	181m W	Unspecified Depot	1967	869671



ID	Location	Land use	Dates present	Group ID
CO	181m W	Mineral Railway Sidings	1967	896468
CP	182m W	Unspecified Tanks	1967 - 1978	954429
CP	182m W	Unspecified Tanks	1990	964653
CQ	185m SW	Unspecified Tank	1967 - 1983	894360
CR	186m NW	Bus Station	1967	857000
BW	187m N	Unspecified Tanks	1967 - 1978	906837
BW	187m N	Unspecified Tanks	1990	963092
BW	187m NE	Unspecified Tanks	1990	952537
BW	187m NE	Unspecified Tanks	1967 - 1978	1007787
BW	189m NE	Unspecified Tanks	1967 - 1978	869489
BW	189m NE	Unspecified Tanks	1990	946077
CS	190m W	Unspecified Tanks	1967 - 1978	957972
CS	190m W	Unspecified Tanks	1990	962638
CT	192m SW	Cuttings	1990	882213
CT	192m SW	Cuttings	1978	892908
CW	199m SW	Unspecified Tank	1978	851465
CV	199m W	Unspecified Tanks	1990	860388
CV	199m W	Unspecified Tanks	1967 - 1978	929238
BV	200m S	Unspecified Tanks	1967 - 1983	1007269
CX	202m NW	Unspecified Tank	1978	939869
CX	202m NW	Unspecified Tank	1990	962619
CY	205m W	Unspecified Tanks	1967 - 1978	909445
CY	205m W	Unspecified Tanks	1990	969275
CX	207m NW	Unspecified Tanks	1990	883963
CX	207m NW	Unspecified Tanks	1967 - 1978	884250
CZ	207m W	Unspecified Tanks	1990	924441
CZ	207m W	Unspecified Tanks	1967 - 1978	989649
CU	208m N	Unspecified Tank	1990	872624



ID	Location	Land use	Dates present	Group ID
CU	208m N	Unspecified Tank	1967 - 1978	920049
CQ	213m SW	Unspecified Tank	1967 - 1983	1000832
DE	225m N	Unspecified Tanks	1990	942386
DE	225m N	Unspecified Tanks	1978	973871
DD	225m N	Unspecified Tank	1990	918561
DD	225m N	Unspecified Tank	1978	1009937
BV	226m S	Unspecified Tanks	1967 - 1983	924888
CY	229m W	Unspecified Tanks	1990	906019
CY	229m W	Unspecified Tanks	1967 - 1978	963430
DC	229m N	Unspecified Tanks	1967 - 1978	941284
DC	229m N	Unspecified Tanks	1990	953231
BW	230m NE	Unspecified Tanks	1967 - 1978	882837
BW	230m NE	Unspecified Tanks	1990	997140
CT	235m SW	Unspecified Tanks	1978	819875
DF	235m N	Unspecified Tanks	1990	897957
DF	235m N	Unspecified Tanks	1978	993836
DG	241m SE	Garage	1968 - 1983	874203
38	242m NE	Cuttings	1990	808204
39	247m N	Unspecified Quarry	1953	840714
DG	247m SE	Smithy	1897 - 1908	893506
BW	249m NE	Unspecified Tanks	1990	869122
BW	249m NE	Unspecified Tanks	1967 - 1978	873524
DI	249m NW	Unspecified Tanks	1978	898750
DI	249m NW	Unspecified Tanks	1990	938030
DJ	250m W	Unspecified Tank	1967 - 1983	970918
DG	255m SE	Smithy	1938 - 1949	908566
DL	257m SW	Unspecified Tank	1967 - 1983	923318
DK	258m NW	Unspecified Tank	1967 - 1978	936603



ID	Location	Land use	Dates present	Group ID
DK	258m NW	Unspecified Tank	1990	969562
DG	258m SE	Smithy	1908	1000900
BV	263m W	Unspecified Tanks	1967 - 1983	931464
CU	263m N	Unspecified Tank	1967 - 1978	871501
CU	263m N	Unspecified Tank	1990	956513
40	267m S	Pump House	1978	856916
DM	269m S	Unspecified Tank	1967 - 1978	920651
DM	269m S	Unspecified Tank	1990	930691
DJ	270m SW	Unspecified Tank	1967 - 1983	889371
DO	273m E	Railway Sidings	1938	985056
H	273m N	Unspecified Works	1967	835924
DE	273m NW	Unspecified Tanks	1990	867394
DE	273m NW	Unspecified Tanks	1967 - 1978	952969
DP	274m W	Unspecified Tank	1978	851444
DO	276m E	Railway Sidings	1897 - 1908	868866
DO	278m E	Railway Sidings	1949 - 1968	863780
DQ	283m S	Unspecified Tanks	1967 - 1978	966130
DQ	283m S	Unspecified Tanks	1990	976965
DR	286m S	Unspecified Tanks	1978	819886
DT	286m W	Unspecified Tank	1978	851443
AQ	288m N	Unspecified Tanks	1967	1002803
H	289m N	Unspecified Tanks	1990	887935
H	289m N	Unspecified Tanks	1967 - 1978	937587
H	290m N	Unspecified Tanks	1990	864626
H	290m N	Unspecified Tanks	1967 - 1978	924215
AQ	291m N	Unspecified Tanks	1978	952882
AQ	291m N	Unspecified Tanks	1990	977353
DO	291m E	Railway Sidings	1908	877487



ID	Location	Land use	Dates present	Group ID
DU	293m S	Unspecified Commercial/Industrial	1978	822648
DU	293m S	Unspecified Works	1967	835943
DW	308m SW	Unspecified Tank	1967 - 1983	931053
DV	309m N	Unspecified Tank	1990	876255
DV	309m N	Unspecified Tank	1978	886818
DY	310m SW	Unspecified Tank	1967 - 1983	986353
W	311m N	Unspecified Tank	1990	885086
W	311m N	Unspecified Tank	1967 - 1978	1000702
DZ	326m N	Unspecified Tanks	1978	888840
DZ	326m N	Unspecified Tanks	1990	900330
DE	336m N	Unspecified Tank	1967	966612
DE	337m N	Unspecified Tank	1990	984819
DE	337m N	Unspecified Tank	1978	994761
EA	341m S	Unspecified Tanks	1978	819870
EC	343m W	Unspecified Tanks	1967 - 1978	902059
EC	343m W	Unspecified Tanks	1990	961864
W	344m N	Unspecified Tank	1990	923447
W	344m N	Unspecified Tank	1967 - 1978	977962
ED	344m W	Unspecified Tanks	1967 - 1978	954209
ED	344m W	Unspecified Tanks	1990	984785
EE	344m W	Unspecified Tanks	1990	995846
EE	344m W	Unspecified Tanks	1967 - 1978	999912
EB	345m N	Unspecified Tank	1990	928586
EB	345m N	Unspecified Tank	1978	965204
EF	346m NW	Unspecified Tanks	1990	863042
EF	346m NW	Unspecified Tanks	1978	941068
AQ	349m N	Unspecified Tank	1967	851453
EG	354m W	Unspecified Tank	1967 - 1983	879484



ID	Location	Land use	Dates present	Group ID
EH	354m SW	Unspecified Tank	1967 - 1983	885317
AQ	355m N	Unspecified Tanks	1978	887608
AQ	355m N	Unspecified Tanks	1990	985922
EI	365m SW	Unspecified Tanks	1978	819876
48	366m S	Boat House	1897	824551
H	368m N	Unspecified Tank	1967	942919
H	368m N	Unspecified Tanks	1967 - 1978	875811
H	368m N	Unspecified Tanks	1990	1009475
EJ	369m SW	Unspecified Tank	1967 - 1983	934767
EI	371m SW	Unspecified Tank	1967	851521
H	372m N	Unspecified Tank	1990	861236
H	372m N	Unspecified Tank	1978	874941
EL	380m N	Unspecified Tank	1967 - 1978	931759
EL	380m N	Unspecified Tank	1990	976006
EN	382m W	Unspecified Tanks	1990	908676
EN	382m W	Unspecified Tanks	1967 - 1978	1001676
EO	385m N	Unspecified Tank	1967	851526
EM	390m NW	Unspecified Tank	1978	909494
EM	390m NW	Unspecified Tank	1990	1007377
EP	392m N	Unspecified Tanks	1978	976448
EP	392m N	Unspecified Tanks	1990	986587
Y	396m SW	Unspecified Tank	1967 - 1983	881275
EL	403m N	Unspecified Tank	1938	940307
EK	404m SW	Unspecified Tanks	1978	997096
EM	405m NW	Unspecified Tanks	1967 - 1978	946471
EM	405m NW	Unspecified Tanks	1990	1004071
EK	408m SW	Unspecified Tanks	1967 - 1978	913957
ER	409m N	Unspecified Tank	1978	889261



ID	Location	Land use	Dates present	Group ID
ER	409m N	Unspecified Tank	1990	947463
H	409m N	Unspecified Tanks	1990	955880
H	409m N	Unspecified Tanks	1967 - 1978	1000763
ES	411m N	Unspecified Tanks	1967	885600
EI	411m SW	Unspecified Tanks	1967 - 1978	901417
EM	412m NW	Unspecified Tank	1978	882486
EM	412m NW	Unspecified Tank	1990	950053
EK	412m SW	Unspecified Tanks	1967	883595
EQ	414m N	Unspecified Tank	1967	851527
EU	416m W	Unspecified Tank	1967 - 1983	933823
EV	416m NE	Unspecified Tank	1967	851439
ES	417m N	Unspecified Tanks	1978	902119
ES	417m N	Unspecified Tanks	1990	985118
EW	419m W	Unspecified Ground Workings	1967	816297
EW	419m W	Unspecified Depot	1967	821420
H	419m N	Unspecified Tanks	1990	880212
H	419m N	Unspecified Tanks	1967 - 1978	905886
EV	421m NE	Chimney	1978	901995
EV	421m NE	Chimney	1990	968896
EX	423m N	Unspecified Tank	1967 - 1978	859929
EX	423m N	Unspecified Tank	1990	865908
EV	424m N	Unspecified Tank	1967 - 1978	866659
EV	424m N	Unspecified Tank	1990	950105
EY	425m NW	Unspecified Tank	1990	887073
EY	425m NW	Unspecified Tank	1978	929356
ES	426m N	Unspecified Tanks	1967	866169
ES	430m N	Unspecified Tanks	1978	894331
ES	430m N	Unspecified Tanks	1990	946395



ID	Location	Land use	Dates present	Group ID
EW	430m W	Unspecified Tanks	1967 - 1978	906845
EZ	430m E	Electric Generating Station	1990	817360
AP	431m SW	Unspecified Tank	1967 - 1983	873071
EW	431m W	Unspecified Tanks	1978	819874
FA	432m W	Unspecified Tanks	1978	819855
52	432m W	Mineral Railway Sidings	1967	960753
FB	432m SW	Unspecified Tank	1967 - 1983	874547
EL	440m N	Unspecified Tank	1967 - 1978	860116
EL	440m N	Unspecified Tank	1990	981398
H	440m N	Unspecified Tanks	1978	916332
H	440m N	Unspecified Tanks	1990	940551
H	441m N	Unspecified Tanks	1967	998823
ET	444m N	Unspecified Tank	1978	896131
ET	444m N	Unspecified Tank	1990	961735
EY	446m NW	Unspecified Tanks	1967	819872
FC	446m W	Unspecified Works	1978	893150
FC	446m W	Unspecified Works	1990	990101
FD	447m N	Smithy	1897	833060
EY	447m NW	Unspecified Tank	1990	990291
EY	447m NW	Unspecified Tank	1978	1006446
FE	449m E	Cuttings	1908 - 1938	869934
EV	449m N	Unspecified Tanks	1990	960196
EV	449m N	Unspecified Tanks	1967 - 1978	968391
FE	450m E	Cuttings	1949	1004913
ES	451m N	Unspecified Tank	1990	875507
ES	451m N	Unspecified Tank	1978	893142
FE	453m E	Cuttings	1897	906155
54	453m W	Unspecified Works	1967	930073



ID	Location	Land use	Dates present	Group ID
FF	456m N	Unspecified Tanks	1967 - 1978	863820
FF	456m N	Unspecified Tanks	1990	905927
FD	457m N	Smithy	1894	833059
EW	457m W	Unspecified Tanks	1978	819888
AP	458m SW	Unspecified Tank	1967 - 1983	888907
FG	458m N	Cuttings	1978	898732
FG	458m N	Cuttings	1990	921959
CO	461m NW	Railway Sidings	1990	893703
CO	461m NW	Railway Sidings	1978	933095
FH	465m N	Unspecified Tank	1978	891868
FH	465m N	Unspecified Tank	1990	995572
EM	468m NW	Unspecified Tank	1978	890115
EM	468m NW	Unspecified Tank	1990	967604
EY	470m NW	Unspecified Tanks	1990	908265
EY	470m NW	Unspecified Tanks	1978	983678
ES	471m N	Unspecified Tanks	1967	819864
FD	475m N	Smithy	1908 - 1913	952986
EY	476m NW	Unspecified Tanks	1967	916074
FI	477m N	Unspecified Tank	1978	929848
FI	477m N	Unspecified Tank	1990	994955
EK	482m SW	Unspecified Tank	1978	851452
H	482m N	Unspecified Tanks	1967 - 1978	967824
H	482m N	Unspecified Tanks	1990	969361
EK	483m SW	Unspecified Tanks	1978	819863
FD	485m N	Smithy	1938 - 1953	885974
FD	485m N	Smithy	1908	901282
FJ	490m SW	Unspecified Tank	1967 - 1983	924838
FK	497m SW	Unspecified Tanks	1990	866784



ID	Location	Land use	Dates present	Group ID
FK	497m SW	Unspecified Tanks	1967 - 1978	978092

This data is sourced from Ordnance Survey® / Groundsure.

1.2 Historical tanks

Records within 500m	1031
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Tank features digitised from historical Ordnance Survey® mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 14 >](#)

ID	Location	Land use	Dates present	Group ID
9	On site	Tanks	1993	111817
10	On site	Unspecified Tank	1993	116380
11	On site	Unspecified Tank	1993	116381
12	On site	Unspecified Tank	1983	125911
13	On site	Unspecified Tank	1993	129064
14	On site	Unspecified Tank	1993	144752
15	On site	Tanks	1980 - 1993	146155
16	On site	Unspecified Tank	1993	153194
A	On site	Tanks	1980	127490
A	On site	Tanks	1993	149079
A	On site	Tanks	1993	151309
A	On site	Tanks	1993	153569
A	On site	Unspecified Tank	1980 - 1993	155518
B	On site	Unspecified Tank	1986	116385
B	On site	Unspecified Tank	1986	116386
B	On site	Unspecified Tank	1986	116387
B	On site	Tanks	1993	126630



ID	Location	Land use	Dates present	Group ID
B	On site	Tanks	1986 - 1993	135845
B	On site	Tanks	1986	141910
B	On site	Tanks	1993	143524
B	On site	Tanks	1986	144650
B	On site	Tanks	1986	145199
B	On site	Tanks	1993	152842
C	On site	Tanks	1980 - 1993	133590
C	On site	Unspecified Tank	1980 - 1993	137019
F	On site	Unspecified Tank	1963	127786
F	On site	Unspecified Tank	1983	129090
F	On site	Unspecified Tank	1958 - 1959	132862
F	On site	Unspecified Tank	1959	136686
F	On site	Unspecified Tank	1993 - 1994	137363
F	On site	Unspecified Tank	1976	141618
F	On site	Unspecified Tank	1958	147987
F	On site	Unspecified Tank	1959	150595
G	On site	Unspecified Tank	1959	114756
G	On site	Tanks	1993	126361
G	On site	Tanks	1993	126795
G	On site	Unspecified Tank	1959	127245
G	On site	Tanks	1959	128944
G	On site	Tanks	1970	129170
G	On site	Unspecified Tank	1980 - 1993	129610
G	On site	Tanks	1980	130245
G	On site	Unspecified Tank	1970	130884
G	On site	Tanks	1959	131906
G	On site	Tanks	1980	132044
G	On site	Tanks	1993	132455



ID	Location	Land use	Dates present	Group ID
G	On site	Unspecified Tank	1993	133381
G	On site	Tanks	1993	133413
G	On site	Tanks	1993	133619
G	On site	Tanks	1993	137498
G	On site	Tanks	1980 - 1993	137584
G	On site	Unspecified Tank	1970 - 1993	138711
G	On site	Tanks	1980	138814
G	On site	Unspecified Tank	1959	139400
G	On site	Tanks	1980	140660
G	On site	Tanks	1993	140792
G	On site	Unspecified Tank	1959	141346
G	On site	Tanks	1993	141628
G	On site	Tanks	1980	142452
G	On site	Tanks	1993	142717
G	On site	Tanks	1990 - 1993	142831
G	On site	Tanks	1980	143433
G	On site	Tanks	1980	144025
G	On site	Tanks	1965	144792
G	On site	Unspecified Tank	1970	144832
G	On site	Unspecified Tank	1980 - 1993	144947
G	On site	Tanks	1980	145112
G	On site	Unspecified Tank	1970	145203
G	On site	Unspecified Tank	1993	145329
G	On site	Tanks	1980	146761
G	On site	Unspecified Tank	1959	148517
G	On site	Tanks	1980	149360
G	On site	Unspecified Tank	1970	149869
G	On site	Tanks	1993	149945



ID	Location	Land use	Dates present	Group ID
G	On site	Tanks	1959	151074
G	On site	Tanks	1959	151369
G	On site	Unspecified Tank	1959 - 1965	153507
G	On site	Tanks	1965	153935
G	On site	Tanks	1965	154030
G	On site	Tanks	1980 - 1993	154214
G	On site	Tanks	1993	154533
G	On site	Unspecified Tank	1980	155150
G	On site	Tanks	1990	155214
G	On site	Tanks	1993	155821
J	On site	Tanks	1986	109124
J	On site	Unspecified Tank	1986	116384
K	On site	Tanks	1993	126418
K	On site	Tanks	1959 - 1961	136205
K	On site	Tanks	1986	149295
L	On site	Tanks	1993	148013
L	On site	Tanks	1986	150804
M	On site	Tanks	1986	142823
M	On site	Tanks	1993	145577
N	On site	Tanks	1959	131725
N	On site	Tanks	1993	137352
N	On site	Tanks	1980	139992
N	On site	Tanks	1965	143080
N	On site	Tanks	1980 - 1993	144014
N	On site	Tanks	1993	145770
N	On site	Tanks	1959 - 1965	149386
N	On site	Tanks	1959 - 1980	150840
O	On site	Unspecified Tank	1993	131981



ID	Location	Land use	Dates present	Group ID
O	On site	Tanks	1965	145167
O	On site	Tanks	1959	146281
O	On site	Unspecified Tank	1993	149447
O	On site	Tanks	1980	150043
Q	On site	Tanks	1980 - 1993	134406
Q	On site	Tanks	1980 - 1993	150468
Q	On site	Tanks	1980 - 1993	153315
R	On site	Unspecified Tank	1965	138715
R	On site	Unspecified Tank	1959	142375
R	On site	Unspecified Tank	1980	156066
T	On site	Tanks	1980	133329
T	On site	Tanks	1993	142209
U	On site	Unspecified Tank	1959	121754
U	On site	Tanks	1980 - 1993	126376
U	On site	Tanks	1993	127484
U	On site	Tanks	1980	127521
U	On site	Tanks	1993	127756
U	On site	Tanks	1959	128088
U	On site	Tanks	1980	128369
U	On site	Tanks	1965	129919
U	On site	Tanks	1993	130223
U	On site	Tanks	1965	130705
U	On site	Tanks	1959	131780
U	On site	Tanks	1965	132108
U	On site	Tanks	1959 - 1980	133858
U	On site	Tanks	1993	135067
U	On site	Tanks	1965	136398
U	On site	Tanks	1959	136612



ID	Location	Land use	Dates present	Group ID
U	On site	Tanks	1965	137959
U	On site	Tanks	1993	138160
U	On site	Tanks	1959	139036
U	On site	Tanks	1993	139315
U	On site	Tanks	1980	139987
U	On site	Tanks	1959 - 1980	140362
U	On site	Tanks	1993	142359
U	On site	Tanks	1980	143198
U	On site	Tanks	1959	143357
U	On site	Tanks	1980 - 1993	145150
U	On site	Tanks	1993	145600
U	On site	Tanks	1959	145658
U	On site	Tanks	1965	146350
U	On site	Tanks	1959	147665
U	On site	Tanks	1959	147816
U	On site	Tanks	1959	148650
U	On site	Tanks	1959 - 1980	148867
U	On site	Tanks	1965	148968
U	On site	Tanks	1980 - 1993	151779
U	On site	Tanks	1965	152281
U	On site	Tanks	1980 - 1993	153077
U	On site	Tanks	1980 - 1993	153238
U	On site	Tanks	1965	153756
U	On site	Tanks	1965	153816
U	On site	Tanks	1959	154192
U	On site	Tanks	1980	154541
U	On site	Tanks	1993	154676
V	On site	Unspecified Tank	1959 - 1965	136632



ID	Location	Land use	Dates present	Group ID
AA	On site	Tanks	1993	132145
AA	On site	Tanks	1993	132623
AA	On site	Tanks	1980	132930
AA	On site	Tanks	1993	136710
AA	On site	Unspecified Tank	1993	146999
AA	On site	Tanks	1980	148361
AA	On site	Tanks	1993	152643
AC	On site	Tanks	1980	130659
AC	On site	Unspecified Tank	1993	145883
AC	On site	Tanks	1993	153423
AD	On site	Unspecified Tank	1959	139397
AD	On site	Unspecified Tank	1993	141455
AD	On site	Unspecified Tank	1965	152787
AD	On site	Unspecified Tank	1980	153320
AE	On site	Unspecified Tank	1959 - 1965	129882
AG	On site	Tanks	1986	109125
AG	On site	Tanks	1986	109126
AG	On site	Unspecified Tank	1986	116383
AH	On site	Unspecified Tank	1959	132750
AH	On site	Unspecified Tank	1965	141074
AH	On site	Unspecified Tank	1980 - 1993	146978
AI	On site	Tanks	1980	138148
AI	On site	Tanks	1993	138351
AI	On site	Tanks	1980	142573
AI	On site	Unspecified Tank	1980 - 1993	150544
AI	On site	Tanks	1993	153699
AJ	On site	Unspecified Tank	1959	118303
AK	On site	Unspecified Tank	1980	121752



ID	Location	Land use	Dates present	Group ID
AK	On site	Unspecified Tank	1980	121753
AK	On site	Tanks	1993	130556
AL	On site	Tanks	1993	129335
AL	On site	Tanks	1980	134349
AM	On site	Unspecified Tank	1970	118321
AM	On site	Unspecified Tank	1970	126297
AM	On site	Tanks	1990	126568
AM	On site	Tanks	1990 - 1993	126628
AM	On site	Tanks	1970 - 1990	127124
AM	On site	Tanks	1993	127784
AM	On site	Tanks	1990 - 1993	128325
AM	On site	Unspecified Tank	1990 - 1993	129824
AM	On site	Tanks	1970	130415
AM	On site	Tanks	1970	131468
AM	On site	Tanks	1993	135703
AM	On site	Tanks	1970	136180
AM	On site	Tanks	1993	137900
AM	On site	Unspecified Tank	1970 - 1993	138217
AM	On site	Tanks	1993	138402
AM	On site	Tanks	1993	140730
AM	On site	Tanks	1970	141558
AM	On site	Tanks	1993	143772
AM	On site	Tanks	1970	144143
AM	On site	Tanks	1990	147044
AM	On site	Tanks	1970	148234
AM	On site	Tanks	1990	149459
AM	On site	Tanks	1990 - 1993	152990
AN	On site	Unspecified Tank	1980	127963



ID	Location	Land use	Dates present	Group ID
AN	On site	Unspecified Tank	1993	132448
AN	On site	Unspecified Tank	1959	141080
AN	On site	Unspecified Tank	1965	145657
AO	On site	Tanks	1993	141868
AO	On site	Tanks	1980	142465
AO	On site	Tanks	1993	147495
AS	On site	Tanks	1970	109786
AS	On site	Tanks	1993	129578
AS	On site	Tanks	1970 - 1993	141579
AS	On site	Unspecified Tank	1990 - 1993	144709
AS	On site	Unspecified Tank	1993	147205
AT	On site	Unspecified Tank	1993	114685
AT	On site	Unspecified Tank	1993	116379
AT	On site	Unspecified Tank	1993	136591
AT	On site	Unspecified Tank	1993	143918
AU	On site	Unspecified Tank	1993	116378
AU	On site	Unspecified Tank	1980	116382
AU	On site	Unspecified Tank	1959	116388
AU	On site	Unspecified Tank	1993	121751
AU	On site	Tanks	1993	126430
AU	On site	Tanks	1959	126998
AU	On site	Unspecified Tank	1993	127329
AU	On site	Tanks	1993	129351
AU	On site	Tanks	1980 - 1993	130510
AU	On site	Tanks	1959	131518
AU	On site	Unspecified Tank	1993	132618
AU	On site	Tanks	1980	133831
AU	On site	Tanks	1993	135650



ID	Location	Land use	Dates present	Group ID
AU	On site	Tanks	1980 - 1993	137111
AU	On site	Tanks	1980	137877
AU	On site	Tanks	1980	140147
AU	On site	Tanks	1965	141076
AU	On site	Tanks	1959 - 1965	141388
AU	On site	Unspecified Tank	1980 - 1993	141431
AU	On site	Tanks	1980 - 1993	142862
AU	On site	Tanks	1993	142989
AU	On site	Unspecified Tank	1959 - 1965	143225
AU	On site	Unspecified Tank	1980 - 1993	143775
AU	On site	Tanks	1993	146581
AU	On site	Tanks	1965	147713
AU	On site	Tanks	1980 - 1993	153551
AU	On site	Tanks	1980 - 1993	155446
AU	On site	Tanks	1980	155772
AV	On site	Unspecified Tank	1970	124213
AV	On site	Tanks	1970	126767
AV	On site	Tanks	1970	133598
AV	On site	Tanks	1990 - 1993	136775
AW	On site	Tanks	1993	130073
AW	On site	Tanks	1993	139024
AW	On site	Tanks	1993	155735
AX	On site	Unspecified Tank	1990 - 1993	140490
AX	On site	Unspecified Tank	1990 - 1993	141348
AY	On site	Tanks	1983 - 1994	151100
AY	1m N	Unspecified Tank	1993	134185
19	4m N	Tanks	1983	110984
BC	5m W	Unspecified Tank	1983	116395



ID	Location	Land use	Dates present	Group ID
BC	6m W	Unspecified Tank	1983	116396
F	6m N	Tanks	1983 - 1994	136256
F	6m N	Tanks	1958	135797
F	7m N	Tanks	1959	150987
BE	7m E	Tanks	1993	155663
BE	8m E	Tanks	1976	152306
AY	8m W	Tanks	1959	108487
F	8m W	Unspecified Tank	1959 - 1963	138301
AY	9m W	Unspecified Tank	1963	142910
AY	9m N	Unspecified Tank	1993	155149
BF	9m W	Tanks	1961	145493
F	9m E	Unspecified Tank	1983 - 1994	131027
BF	10m W	Tanks	1961	134504
BB	10m W	Tanks	1959 - 1961	146770
BF	10m W	Tanks	1986	128700
BF	10m W	Tanks	1959	148669
BF	11m W	Tanks	1986	136535
BF	11m W	Tanks	1959	141107
BD	11m W	Tanks	1961	148229
BD	12m W	Tanks	1959	127175
BD	12m W	Tanks	1986	140255
BI	14m N	Unspecified Tank	1982 - 1993	131558
BH	14m W	Tanks	1961	110833
BH	14m W	Tanks	1961	110832
BG	14m W	Unspecified Tank	1965	126239
BG	14m W	Tanks	1961	108486
BG	14m W	Unspecified Tank	1993	148568
BG	14m W	Unspecified Tank	1986	126788



ID	Location	Land use	Dates present	Group ID
BG	14m W	Unspecified Tank	1959	137916
BG	15m W	Unspecified Tank	1993	151366
BG	15m W	Unspecified Tank	1980 - 1986	133440
BG	15m W	Unspecified Tank	1959	147593
21	15m W	Tanks	1986 - 1993	134731
BH	16m W	Unspecified Tank	1959	127661
BH	16m W	Unspecified Tank	1986	148825
22	16m W	Tanks	1986 - 1993	136473
BH	16m W	Unspecified Tank	1986	142212
BH	16m W	Unspecified Tank	1959	144008
BJ	16m W	Tanks	1993	144330
BJ	16m W	Tanks	1986	153983
23	16m N	Tanks	1983	110983
AY	19m SE	Unspecified Tank	1959	138429
BG	19m W	Unspecified Tank	1993	152475
BD	20m W	Unspecified Tank	1986	127041
BD	20m W	Unspecified Tank	1959	135494
AY	20m SE	Unspecified Tank	1958	147151
BA	20m N	Tanks	1983 - 1993	129124
BA	20m N	Tanks	1959	153167
BA	20m N	Tanks	1960	131538
BA	20m N	Tanks	1959 - 1960	139461
BA	20m N	Tanks	1983	153267
BA	21m N	Tanks	1993	136461
BK	22m N	Tanks	1959 - 1960	145138
BA	22m N	Tanks	1983 - 1993	141718
BA	22m N	Tanks	1959	153370
BK	22m N	Tanks	1983	148096



ID	Location	Land use	Dates present	Group ID
BK	22m N	Tanks	1983	126890
24	25m E	Tanks	1986	110837
F	26m SW	Unspecified Tank	1958 - 1959	129801
AY	30m N	Unspecified Tank	1963	132569
BO	30m S	Tanks	1958 - 1986	134548
BN	30m NE	Tanks	1983	134647
BN	30m NE	Tanks	1959	135745
BN	31m NE	Tanks	1960	131247
BA	33m N	Tanks	1959	130721
BA	33m N	Tanks	1983 - 1993	135483
BO	34m S	Unspecified Tank	1993 - 1994	145022
BA	36m N	Unspecified Tank	1983	125934
BC	37m W	Unspecified Tank	1983	116394
BH	38m W	Tanks	1961	132832
BH	38m W	Tanks	1959	131933
BH	38m W	Tanks	1986	148922
BL	41m NE	Unspecified Tank	1993	135437
BL	42m NE	Unspecified Tank	1968 - 1982	137515
BR	42m N	Tanks	1983 - 1993	152413
BD	42m NW	Unspecified Tank	1986	144383
BD	42m NW	Unspecified Tank	1959	145711
BL	42m NE	Unspecified Tank	1968 - 1993	155562
BO	45m S	Tanks	1959	131476
BK	46m N	Tanks	1993	126409
BK	47m N	Tanks	1983	132982
BO	48m SW	Unspecified Tank	1993	114695
26	49m N	Unspecified Tank	1987 - 1993	154834
BD	51m NW	Unspecified Tank	1985	144366



ID	Location	Land use	Dates present	Group ID
BO	51m SW	Tanks	1994	130314
BD	52m NW	Unspecified Tank	1959	132474
BR	53m N	Unspecified Tank	1983 - 1993	155182
BN	55m N	Unspecified Tank	1959	136390
BN	55m N	Unspecified Tank	1983	149689
BD	55m W	Unspecified Tank	1985	146184
BD	55m W	Unspecified Tank	1959	153196
BH	57m W	Unspecified Tank	1959	133775
BH	57m W	Unspecified Tank	1986	146675
BH	57m W	Unspecified Tank	1986	139979
BH	57m W	Unspecified Tank	1959	148884
BA	58m N	Tanks	1959	127105
BA	58m N	Tanks	1983	142711
BA	58m N	Tanks	1993	146177
BN	59m N	Tanks	1983	140391
BN	59m N	Tanks	1959	153396
BH	60m W	Tanks	1961	110834
BH	61m W	Unspecified Tank	1959	146740
BH	61m W	Unspecified Tank	1986	153497
BH	64m W	Tanks	1961 - 1985	126631
BH	65m W	Unspecified Tank	1959	121378
BH	65m W	Unspecified Tank	1985	143044
BO	68m SW	Unspecified Tank	1993	114694
BD	69m NW	Unspecified Tank	1985	127965
28	69m N	Tanks	1983 - 1993	151115
BD	69m NW	Unspecified Tank	1959	144726
BH	71m W	Unspecified Tank	1985	148249
29	71m S	Unspecified Tank	1983 - 1994	131246



ID	Location	Land use	Dates present	Group ID
30	77m N	Tanks	1986 - 1993	151794
BW	82m N	Tanks	1959	144960
BW	82m N	Tanks	1983	156078
BW	82m N	Tanks	1960	141946
BH	83m W	Unspecified Tank	1959	145898
BV	83m S	Unspecified Tank	1994	121487
BV	84m S	Tanks	1983	132418
BH	84m W	Unspecified Tank	1985	144867
BV	84m S	Tanks	1959	154982
BV	84m S	Tanks	1958	131441
BL	87m NE	Unspecified Tank	1982 - 1993	155944
BX	88m E	Tanks	1959 - 1986	148864
BF	88m W	Unspecified Tank	1959	146991
BF	88m W	Unspecified Tank	1985	126744
BL	88m NE	Unspecified Tank	1982 - 1993	139084
BV	88m S	Unspecified Tank	1994	121490
BR	90m N	Unspecified Tank	1983 - 1993	142963
BD	92m W	Unspecified Tank	1985	149209
AR	92m N	Unspecified Tank	1993	118318
BD	92m W	Unspecified Tank	1959	152219
BD	93m W	Unspecified Tank	1985	149369
BD	94m W	Unspecified Tank	1959	135652
BF	94m W	Unspecified Tank	1959	155393
BH	94m W	Unspecified Tank	1959	121377
BF	95m W	Unspecified Tank	1985	152881
BH	96m W	Unspecified Tank	1959	136353
BH	96m W	Unspecified Tank	1985	146384
BH	98m W	Unspecified Tank	1959	131500



ID	Location	Land use	Dates present	Group ID
BV	98m S	Unspecified Tank	1994	121491
BH	99m W	Unspecified Tank	1985	135461
BD	100m W	Unspecified Tank	1985	136830
BD	101m W	Unspecified Tank	1959	143979
CA	102m N	Unspecified Tank	1982 - 1993	153193
BF	106m W	Unspecified Tank	1959	138313
BH	106m W	Unspecified Tank	1959	133715
BF	107m W	Unspecified Tank	1959	147490
BH	107m W	Unspecified Tank	1985	143038
BF	107m W	Unspecified Tank	1985	150999
BF	107m W	Unspecified Tank	1985	147211
BZ	110m SE	Unspecified Tank	1959 - 1963	138490
BO	112m SW	Unspecified Tank	1994	139280
BO	112m SW	Unspecified Tank	1958	155465
BO	113m SW	Unspecified Tank	1983	151161
BV	115m SW	Unspecified Tank	1994	121488
BV	116m SW	Tanks	1958	135630
BV	116m SW	Tanks	1983	131115
BV	116m SW	Tanks	1959	139716
CB	117m NW	Unspecified Tank	1986	128605
CB	117m NW	Unspecified Tank	1959	128618
CB	118m NW	Tanks	1961	110074
CB	118m N	Unspecified Tank	1993	131887
CB	119m N	Unspecified Tank	1959 - 1986	151861
CD	119m N	Unspecified Tank	1968	143902
CD	119m N	Unspecified Tank	1959	151608
CD	119m N	Unspecified Tank	1965	149339
BR	124m N	Tanks	1983 - 1993	145678



ID	Location	Land use	Dates present	Group ID
BL	129m N	Unspecified Tank	1982 - 1993	144568
CB	130m NW	Tanks	1961	110075
CB	130m NW	Unspecified Tank	1993	132578
CG	130m N	Tanks	1983 - 1993	137958
CB	130m NW	Unspecified Tank	1959	140552
CB	130m NW	Unspecified Tank	1986	153667
CG	131m N	Tanks	1959	134909
CC	132m W	Tanks	1994	109129
BV	133m S	Unspecified Tank	1958 - 1994	136828
BL	133m NE	Unspecified Tank	1982 - 1993	150385
CD	134m N	Unspecified Tank	1984	146616
BW	134m N	Tanks	1959	135741
BW	134m N	Tanks	1983	139724
CJ	135m N	Tanks	1959	136118
CJ	135m N	Tanks	1983	136450
CJ	135m N	Tanks	1959 - 1960	138648
CH	135m S	Tanks	1983 - 1994	132654
CI	135m SW	Unspecified Tank	1974 - 1983	148109
BW	135m N	Tanks	1960	127256
CH	136m S	Tanks	1959	139236
CH	136m S	Tanks	1958	155363
CJ	136m N	Tanks	1993	143864
BY	136m NW	Unspecified Tank	1974 - 1993	127763
BW	137m N	Unspecified Tank	1959	121750
BW	137m N	Tanks	1983	128704
CG	137m N	Tanks	1993	138039
CG	137m N	Tanks	1959 - 1983	144953
CJ	139m N	Unspecified Tank	1965 - 1968	147794



ID	Location	Land use	Dates present	Group ID
CJ	140m N	Unspecified Tank	1959	126250
CJ	140m N	Unspecified Tank	1987 - 1993	155454
CK	140m N	Tanks	1993	131225
CK	141m N	Tanks	1959 - 1960	126856
CK	141m N	Tanks	1983	145110
CG	143m N	Tanks	1960	135950
CL	148m N	Unspecified Tank	1993	153100
CL	148m N	Unspecified Tank	1968 - 1987	151501
CB	153m N	Unspecified Tank	1993	135561
CB	153m N	Unspecified Tank	1959	134244
CB	153m N	Unspecified Tank	1986	144432
BV	153m S	Unspecified Tank	1994	121489
BY	154m NW	Unspecified Tank	1993	116677
BV	156m S	Tanks	1983	153087
BV	156m S	Tanks	1959	137787
BV	156m S	Tanks	1958	134850
BV	156m S	Unspecified Tank	1994	121493
BW	157m NE	Tanks	1959	132976
CJ	158m N	Tanks	1965 - 1968	149788
BV	159m S	Unspecified Tank	1994	121492
36	160m W	Unspecified Tank	1983	121494
CB	163m NW	Unspecified Tank	1993	134769
BY	163m NW	Unspecified Tank	1974	153230
37	164m S	Tanks	1986 - 1993	152232
BY	164m NW	Unspecified Tank	1993	144326
CB	164m NW	Unspecified Tank	1986	127419
CB	164m NW	Unspecified Tank	1959	130878
BW	166m N	Tanks	1983 - 1993	148086



ID	Location	Land use	Dates present	Group ID
CM	167m W	Tanks	1974	109214
CJ	169m N	Tanks	1987	126211
CJ	169m N	Tanks	1993	153616
CB	180m NW	Unspecified Tank	1993	150534
CB	181m NW	Unspecified Tank	1986	143122
CB	181m NW	Unspecified Tank	1959	149239
CP	184m W	Unspecified Tank	1961	140765
CE	184m NE	Tanks	1965	109780
CP	185m W	Unspecified Tank	1961	142286
CP	185m W	Unspecified Tank	1959	128694
CP	185m W	Unspecified Tank	1959	134630
CQ	185m SW	Unspecified Tank	1959	127670
CP	185m W	Unspecified Tank	1985	145674
CP	185m W	Tanks	1993	110836
CQ	185m SW	Tanks	1958	110877
CP	185m W	Unspecified Tank	1985	132590
CP	186m W	Tanks	1993	110835
CQ	186m SW	Unspecified Tank	1994	155757
BW	187m N	Unspecified Tank	1959	145184
CQ	187m SW	Unspecified Tank	1983	139839
BW	187m NE	Tanks	1993	151693
BW	187m NE	Tanks	1983	145297
P	189m N	Tanks	1983	132735
P	189m N	Tanks	1993	126586
CE	191m NE	Tanks	1965	109779
CJ	195m N	Tanks	1959	149272
CU	197m N	Tanks	1965	150568
CJ	197m N	Tanks	1983	153443



ID	Location	Land use	Dates present	Group ID
CV	197m W	Tanks	1985 - 1993	149417
CV	197m W	Unspecified Tank	1959	121375
CV	197m W	Tanks	1961	129751
CS	198m W	Tanks	1961 - 1985	145188
CS	198m W	Tanks	1961	142958
CS	199m W	Unspecified Tank	1959	119203
CS	199m W	Tanks	1993	134419
CS	201m W	Tanks	1985 - 1993	128317
CS	201m W	Unspecified Tank	1959	119201
CY	203m W	Unspecified Tank	1959	151615
CY	204m W	Tanks	1961	110830
CX	204m NW	Unspecified Tank	1983 - 1993	155938
CY	204m W	Unspecified Tank	1959	143617
CW	204m SW	Unspecified Tank	1974	130430
CY	204m W	Unspecified Tank	1985	148403
CY	204m W	Unspecified Tank	1985	147596
CY	205m W	Unspecified Tank	1993	133490
BV	205m S	Tanks	1994	129173
CY	205m W	Unspecified Tank	1993	147261
BV	205m S	Tanks	1959 - 1983	153301
BW	205m NE	Tanks	1983 - 1993	129137
CW	205m SW	Unspecified Tank	1983	153718
BV	205m S	Tanks	1958	153339
CU	206m N	Tanks	1987 - 1993	147383
CU	206m N	Unspecified Tank	1959	151704
CU	206m N	Unspecified Tank	1968	154958
DA	208m W	Tanks	1974	112022
CW	208m W	Unspecified Tank	1974	127908



ID	Location	Land use	Dates present	Group ID
CX	209m NW	Tanks	1960	151105
CX	209m NW	Tanks	1983 - 1993	132098
CX	209m NW	Tanks	1959	146912
BW	211m N	Unspecified Tank	1983	148842
BW	212m NE	Tanks	1959	151862
CQ	213m SW	Unspecified Tank	1959	147911
DA	214m W	Tanks	1974 - 1993	148145
CQ	214m SW	Unspecified Tank	1994	134921
CQ	214m SW	Unspecified Tank	1983	130111
DA	214m W	Tanks	1974 - 1993	145767
CZ	220m W	Unspecified Tank	1985	153851
CZ	220m W	Unspecified Tank	1959	156030
CZ	220m W	Tanks	1961	110077
CZ	220m W	Unspecified Tank	1993	148492
DC	222m N	Tanks	1965	144395
DD	225m NW	Unspecified Tank	1982 - 1993	140335
BW	225m NE	Unspecified Tank	1959	136868
BW	225m NE	Unspecified Tank	1993	150344
DB	227m N	Tanks	1993	131880
DB	228m N	Tanks	1983 - 1987	155278
CP	228m W	Unspecified Tank	1959	127653
CP	228m W	Unspecified Tank	1961	143470
CP	228m W	Unspecified Tank	1959	145118
CP	229m W	Unspecified Tank	1985	147331
DC	229m N	Tanks	1959	153045
CP	229m W	Unspecified Tank	1961	144473
CP	229m W	Unspecified Tank	1985	136846
BV	230m S	Tanks	1994	152924



ID	Location	Land use	Dates present	Group ID
DC	230m N	Tanks	1993	136886
BV	230m S	Tanks	1958	129373
DC	231m N	Tanks	1968	131789
CT	231m SW	Tanks	1974 - 1983	140239
DC	231m N	Tanks	1987	146709
DE	231m N	Tanks	1993	135685
DE	232m N	Tanks	1983	130617
DF	234m N	Tanks	1987 - 1993	129809
DE	234m N	Tanks	1993	150919
DE	235m N	Tanks	1983 - 1987	155703
CY	235m W	Unspecified Tank	1959	148371
CY	235m W	Unspecified Tank	1959	150122
CY	235m W	Unspecified Tank	1985 - 1993	137153
CY	235m W	Tanks	1961	110831
CY	236m W	Unspecified Tank	1985	131220
CY	236m W	Unspecified Tank	1993	129045
BW	236m NE	Tanks	1983 - 1993	152691
CZ	245m NW	Unspecified Tank	1985 - 1986	127595
CZ	246m NW	Unspecified Tank	1993	140492
CZ	246m NW	Unspecified Tank	1959	137217
CZ	246m NW	Unspecified Tank	1993	155139
CZ	246m NW	Unspecified Tank	1959	126264
CV	248m W	Unspecified Tank	1959	121376
DE	249m NW	Unspecified Tank	1993	114705
CS	249m W	Unspecified Tank	1959	119204
DJ	251m W	Unspecified Tank	1959	150356
DJ	251m W	Tanks	1958	110876
DJ	252m W	Unspecified Tank	1994	134827



ID	Location	Land use	Dates present	Group ID
CS	252m W	Unspecified Tank	1959	119202
DC	252m N	Tanks	1965	134138
DJ	252m W	Unspecified Tank	1983	143220
DK	257m NW	Unspecified Tank	1961	141984
DK	257m NW	Unspecified Tank	1993	141604
DK	259m NW	Unspecified Tank	1959	130173
DK	259m NW	Unspecified Tank	1986	133616
DI	259m NW	Tanks	1974 - 1993	143284
DL	259m SW	Unspecified Tank	1959	132508
DL	259m SW	Unspecified Tank	1983	150280
CF	259m NW	Tanks	1993	109208
DL	259m SW	Unspecified Tank	1994	143854
DC	260m N	Tanks	1987	146584
DL	260m SW	Unspecified Tank	1958	127454
CU	260m N	Tanks	1987 - 1993	133306
CU	261m N	Unspecified Tank	1968	127480
CU	261m N	Unspecified Tank	1959	140935
DC	262m N	Tanks	1959	134424
DC	263m N	Tanks	1993	127076
DC	263m N	Tanks	1968	151304
DC	264m N	Tanks	1987	144380
BV	265m W	Tanks	1994	151206
BV	265m W	Tanks	1958	130977
BV	265m W	Tanks	1959	150007
BV	265m W	Tanks	1983	130926
CZ	267m W	Unspecified Tank	1985	127911
CZ	268m W	Unspecified Tank	1959	137934
CZ	269m W	Tanks	1961	110076



ID	Location	Land use	Dates present	Group ID
CZ	269m W	Unspecified Tank	1993	130755
CY	270m W	Unspecified Tank	1959	133091
DM	270m S	Unspecified Tank	1959 - 1993	138440
CY	270m W	Tanks	1961	110829
CY	270m W	Unspecified Tank	1985	147344
CY	270m W	Unspecified Tank	1959	141493
DE	270m NW	Tanks	1983 - 1987	155185
CY	270m W	Unspecified Tank	1993	137118
41	270m N	Unspecified Tank	1983 - 1993	149381
CY	271m W	Unspecified Tank	1985	141673
CY	271m W	Unspecified Tank	1993	133078
CP	271m W	Unspecified Tank	1959 - 1985	135628
CP	271m W	Unspecified Tank	1961 - 1985	140937
DE	271m NW	Unspecified Tank	1993	138836
CP	271m W	Unspecified Tank	1959	131107
DE	271m NW	Tanks	1960	148490
DE	272m NW	Unspecified Tank	1959	144692
DJ	272m SW	Unspecified Tank	1959	128997
DJ	273m SW	Unspecified Tank	1994	133489
DJ	274m SW	Unspecified Tank	1983	154196
DP	278m W	Tanks	1974	109213
H	283m N	Tanks	1959 - 1960	127354
AQ	285m N	Tanks	1993	134188
AQ	286m N	Tanks	1959	152627
DS	286m N	Unspecified Tank	1987 - 1993	154931
AQ	286m N	Tanks	1960	150970
AQ	287m N	Tanks	1983 - 1987	129917
H	287m N	Unspecified Tank	1959	138815



ID	Location	Land use	Dates present	Group ID
H	288m N	Unspecified Tank	1960	151490
H	288m N	Unspecified Tank	1983 - 1987	132226
DC	288m N	Tanks	1987	134468
CZ	289m W	Unspecified Tank	1985	127792
AQ	289m N	Tanks	1993	150532
DR	289m S	Tanks	1986	109215
CZ	289m W	Unspecified Tank	1993	142682
CZ	289m W	Unspecified Tank	1993	146734
CZ	289m W	Unspecified Tank	1959	127163
H	290m N	Tanks	1993	136488
AQ	290m N	Tanks	1959	155606
CZ	290m W	Unspecified Tank	1986	149585
CZ	290m W	Unspecified Tank	1959	151461
AQ	292m N	Tanks	1983 - 1987	141840
H	292m N	Unspecified Tank	1959	125904
DT	292m W	Unspecified Tank	1974	116679
H	292m N	Tanks	1960	151466
H	292m N	Unspecified Tank	1959	155768
DC	293m N	Tanks	1987	143467
H	293m N	Unspecified Tank	1959	135287
H	293m N	Tanks	1983 - 1987	132400
H	293m N	Unspecified Tank	1983 - 1987	156104
H	293m N	Unspecified Tank	1983 - 1987	131126
H	294m N	Unspecified Tank	1959	125902
DE	295m N	Unspecified Tank	1993	143193
H	296m N	Tanks	1993	133455
DE	297m N	Unspecified Tank	1983 - 1987	147917
DT	298m W	Unspecified Tank	1974	133460



ID	Location	Land use	Dates present	Group ID
H	298m N	Tanks	1959	138428
H	299m N	Tanks	1983 - 1987	134180
DT	299m W	Unspecified Tank	1983	149330
W	301m N	Tanks	1965	151261
DE	303m NW	Unspecified Tank	1993	134649
DE	304m NW	Unspecified Tank	1959	134538
DV	306m N	Unspecified Tank	1982 - 1993	150101
H	307m N	Tanks	1993	152085
W	307m N	Unspecified Tank	1993	152978
H	308m N	Unspecified Tank	1959	125905
DQ	308m S	Unspecified Tank	1959	130598
DQ	308m S	Unspecified Tank	1986 - 1993	135398
DQ	308m S	Tanks	1961	110078
W	309m N	Unspecified Tank	1959	146202
W	309m N	Tanks	1968 - 1987	149944
H	309m N	Tanks	1983 - 1987	132311
H	309m N	Unspecified Tank	1959	125908
DW	309m SW	Unspecified Tank	1959	149595
DW	310m SW	Unspecified Tank	1958	128667
DS	310m N	Tanks	1993	154045
DW	310m SW	Unspecified Tank	1983	130487
DS	311m N	Tanks	1959	139269
DS	311m N	Tanks	1968	155948
DW	311m SW	Unspecified Tank	1994	129936
DS	311m N	Tanks	1987	140707
DS	311m N	Tanks	1960	132394
DY	312m SW	Unspecified Tank	1983	133664
DY	312m SW	Unspecified Tank	1959	142352



ID	Location	Land use	Dates present	Group ID
DY	312m SW	Unspecified Tank	1958	147775
DY	313m SW	Unspecified Tank	1994	147164
H	313m N	Unspecified Tank	1959	133849
DS	314m N	Tanks	1968	126280
DS	314m N	Tanks	1959	131654
H	314m N	Unspecified Tank	1983 - 1987	149291
H	314m N	Tanks	1993	142066
H	315m N	Unspecified Tank	1959	154921
H	315m N	Unspecified Tank	1983 - 1987	140224
H	315m N	Unspecified Tank	1959	125903
H	316m N	Tanks	1993	154123
DQ	316m NW	Unspecified Tank	1993	134304
DQ	316m NW	Tanks	1961	110073
DQ	316m NW	Unspecified Tank	1986	139004
DQ	316m NW	Unspecified Tank	1959	146128
H	317m N	Unspecified Tank	1959	125909
H	319m N	Tanks	1983 - 1987	134776
DS	320m N	Tanks	1959	149435
DS	320m N	Tanks	1968	156231
DC	321m N	Tanks	1987	144154
H	321m N	Tanks	1993	127693
H	323m N	Unspecified Tank	1959	125906
AQ	324m N	Unspecified Tank	1983 - 1987	153371
H	324m N	Tanks	1983 - 1987	149278
H	325m N	Unspecified Tank	1959	125907
H	325m N	Tanks	1993	127420
DQ	326m S	Unspecified Tank	1986	132096
DQ	326m S	Unspecified Tank	1959	144227



ID	Location	Land use	Dates present	Group ID
DQ	326m S	Unspecified Tank	1993	140869
H	327m N	Unspecified Tank	1959	125901
DS	327m N	Tanks	1987	150567
DS	328m N	Unspecified Tank	1987	121746
DS	333m N	Unspecified Tank	1987 - 1993	129711
DZ	334m N	Tanks	1987 - 1993	150466
DE	335m N	Unspecified Tank	1993	150585
H	336m N	Unspecified Tank	1959	151926
H	337m N	Unspecified Tank	1959	150761
DE	337m N	Unspecified Tank	1959 - 1960	133283
H	337m N	Unspecified Tank	1983 - 1987	149937
DE	338m N	Unspecified Tank	1983 - 1987	129732
H	338m N	Unspecified Tank	1983 - 1987	126545
W	342m N	Tanks	1993	147647
W	342m N	Unspecified Tank	1959	121730
W	342m N	Tanks	1968	151195
W	342m N	Tanks	1987	126717
EB	343m N	Unspecified Tank	1968 - 1987	133264
EB	343m N	Unspecified Tank	1993	139078
DS	344m N	Unspecified Tank	1959 - 1968	130112
EA	345m S	Tanks	1974 - 1983	129966
46	346m SW	Unspecified Tank	1974 - 1983	141225
H	347m N	Tanks	1983 - 1993	149801
EC	349m W	Unspecified Tank	1959	134988
ED	349m W	Tanks	1961	110072
ED	349m W	Unspecified Tank	1985	150853
EC	350m W	Unspecified Tank	1993	146600
DQ	350m NW	Unspecified Tank	1993	129647



ID	Location	Land use	Dates present	Group ID
ED	350m W	Unspecified Tank	1959	131612
EC	350m W	Unspecified Tank	1985	138548
EC	350m W	Unspecified Tank	1959	137645
EC	350m W	Tanks	1961	110828
AQ	350m N	Unspecified Tank	1959 - 1960	134724
EE	351m W	Unspecified Tank	1959 - 1961	148571
EE	351m W	Unspecified Tank	1961 - 1985	153215
EC	351m W	Unspecified Tank	1985 - 1993	138729
ED	351m W	Unspecified Tank	1993	142490
EE	351m W	Unspecified Tank	1959	149088
EE	352m W	Unspecified Tank	1993	147661
EG	352m W	Unspecified Tank	1959	151193
DQ	352m NW	Unspecified Tank	1986	126302
DQ	352m NW	Unspecified Tank	1959	148402
EE	352m W	Unspecified Tank	1985	138931
EG	353m W	Unspecified Tank	1994	128942
EG	353m W	Unspecified Tank	1958	133484
EE	353m W	Unspecified Tank	1993	134291
EB	354m N	Unspecified Tank	1993	148859
EG	354m W	Unspecified Tank	1983	155736
ED	355m W	Unspecified Tank	1985	133403
EH	356m SW	Unspecified Tank	1959	135791
ED	356m W	Unspecified Tank	1959	144140
EH	356m SW	Unspecified Tank	1983	154416
ED	356m W	Unspecified Tank	1993	137656
EF	356m NW	Tanks	1974 - 1993	134249
EH	356m SW	Unspecified Tank	1958	127274
EH	357m SW	Unspecified Tank	1994	154189



ID	Location	Land use	Dates present	Group ID
AQ	357m N	Tanks	1993	146926
CR	358m NW	Tanks	1974	109212
47	358m N	Tanks	1987 - 1993	130144
AQ	359m N	Tanks	1983 - 1987	148969
DS	365m N	Unspecified Tank	1959 - 1968	133063
EJ	368m SW	Unspecified Tank	1959	153523
EJ	369m SW	Unspecified Tank	1983 - 1994	140326
EJ	369m SW	Unspecified Tank	1958	152437
H	370m N	Tanks	1983 - 1993	149783
H	370m N	Unspecified Tank	1993	134986
H	370m N	Tanks	1959 - 1960	141042
H	371m N	Unspecified Tank	1959	144716
EI	371m SW	Tanks	1974	109211
H	372m N	Unspecified Tank	1959	125895
EI	372m SW	Unspecified Tank	1983	116674
H	372m N	Unspecified Tank	1983 - 1987	150966
H	372m N	Unspecified Tank	1959	125894
H	372m N	Tanks	1960	135536
EK	374m SW	Unspecified Tank	1983	116671
H	375m N	Unspecified Tank	1959	133344
H	376m N	Unspecified Tank	1983 - 1987	151606
H	376m N	Unspecified Tank	1959	125896
EL	378m N	Unspecified Tank	1968 - 1982	155041
EL	378m N	Unspecified Tank	1987	134979
EL	379m N	Unspecified Tank	1968	148549
EL	379m N	Unspecified Tank	1993	142432
EL	379m N	Unspecified Tank	1993	153378
EN	380m W	Tanks	1961	132663



ID	Location	Land use	Dates present	Group ID
EN	380m W	Unspecified Tank	1959	143659
EN	380m W	Unspecified Tank	1985	126221
EN	381m W	Unspecified Tank	1993	131597
H	381m N	Unspecified Tank	1959	125899
H	382m N	Unspecified Tank	1959	125900
H	383m N	Tanks	1959	143632
DZ	383m N	Unspecified Tank	1993	143764
DZ	384m N	Unspecified Tank	1978	140402
EI	385m SW	Unspecified Tank	1983	116675
EO	386m N	Unspecified Tank	1959 - 1960	130716
DZ	387m N	Unspecified Tank	1978 - 1993	143593
H	388m N	Tanks	1959	145275
H	389m N	Unspecified Tank	1959	125910
49	389m W	Unspecified Tank	1974	116678
H	392m N	Tanks	1959	128125
EP	392m N	Unspecified Tank	1978	141509
EP	393m N	Unspecified Tank	1993	141499
EP	393m N	Unspecified Tank	1987	143397
EN	394m W	Unspecified Tank	1993	126234
H	394m N	Unspecified Tank	1959	125897
EN	394m W	Tanks	1959	145056
EN	394m W	Tanks	1986	150216
H	395m N	Tanks	1959	144453
EM	396m NW	Unspecified Tank	1974	125107
ED	397m W	Tanks	1985 - 1993	128361
Y	397m SW	Unspecified Tank	1959	142986
Y	398m SW	Unspecified Tank	1958	155515
Y	399m SW	Unspecified Tank	1994	140593

ID	Location	Land use	Dates present	Group ID
Y	399m SW	Unspecified Tank	1983	149820
EN	399m S	Unspecified Tank	1993	119199
EM	403m NW	Unspecified Tank	1960	141506
EM	403m NW	Unspecified Tank	1974	127299
EM	403m NW	Unspecified Tank	1958	144819
EN	403m W	Unspecified Tank	1993	119200
H	404m N	Tanks	1959	147534
EQ	407m N	Unspecified Tank	1987 - 1993	134181
ER	409m N	Unspecified Tank	1978 - 1993	146251
ES	410m N	Tanks	1983 - 1987	137694
ES	411m N	Tanks	1959	128819
ES	411m N	Tanks	1960	128961
EP	411m N	Unspecified Tank	1987 - 1993	145201
H	411m N	Unspecified Tank	1993	129713
EK	412m SW	Unspecified Tank	1958 - 1983	143279
H	412m N	Tanks	1959	131372
EC	413m W	Unspecified Tank	1959	150621
EQ	413m N	Unspecified Tank	1968	121747
H	413m N	Unspecified Tank	1983 - 1987	152080
EK	413m SW	Tanks	1974	147634
EM	413m NW	Unspecified Tank	1960	155204
H	414m N	Unspecified Tank	1983	125892
EK	414m SW	Tanks	1983	152683
EC	414m W	Unspecified Tank	1959	146835
EM	414m NW	Unspecified Tank	1958	144170
EM	414m NW	Unspecified Tank	1974	150977
EC	414m W	Unspecified Tank	1985	151194
H	415m N	Unspecified Tank	1993	132449



ID	Location	Land use	Dates present	Group ID
EC	415m W	Unspecified Tank	1993	138705
EC	415m W	Unspecified Tank	1993	155430
H	415m N	Unspecified Tank	1959	151120
H	415m N	Unspecified Tank	1960	129280
EE	415m W	Unspecified Tank	1959	150328
EI	415m SW	Tanks	1974 - 1983	141758
EE	415m W	Unspecified Tank	1959	133029
EC	415m W	Unspecified Tank	1985	146903
EE	415m W	Unspecified Tank	1961 - 1985	130209
H	415m N	Unspecified Tank	1983	138023
H	415m N	Unspecified Tank	1987	148079
EE	415m W	Unspecified Tank	1961 - 1985	138267
EE	416m W	Unspecified Tank	1993	139614
H	416m N	Tanks	1960	132762
ES	416m N	Tanks	1959	131099
EU	416m W	Unspecified Tank	1994	151109
EU	416m W	Unspecified Tank	1959	131758
EU	416m W	Unspecified Tank	1958	130070
H	417m N	Unspecified Tank	1983 - 1987	152461
ES	417m N	Tanks	1983 - 1987	134467
EE	417m W	Unspecified Tank	1993	131189
EU	418m W	Unspecified Tank	1983	139622
H	419m N	Unspecified Tank	1959	125898
H	422m N	Tanks	1959 - 1987	141894
EM	422m NW	Unspecified Tank	1974 - 1993	151780
EM	422m NW	Unspecified Tank	1959	152944
EV	424m N	Unspecified Tank	1968	121748
EX	425m N	Unspecified Tank	1968 - 1993	136708



ID	Location	Land use	Dates present	Group ID
51	426m N	Unspecified Tank	1987 - 1993	150283
EY	427m NW	Unspecified Tank	1974 - 1993	136551
H	429m N	Unspecified Tank	1959	125893
ES	429m N	Tanks	1959	127375
H	430m N	Unspecified Tank	1993	141582
ES	430m N	Tanks	1960	145307
AP	430m SW	Unspecified Tank	1959	128728
EK	430m SW	Unspecified Tank	1958 - 1974	150928
ES	431m N	Tanks	1983 - 1987	129388
AP	431m SW	Unspecified Tank	1994	143871
FA	431m W	Tanks	1974	109219
AP	431m SW	Unspecified Tank	1958	146464
EW	431m W	Unspecified Tank	1974	138591
EW	431m W	Unspecified Tank	1958	152272
EK	431m SW	Unspecified Tank	1983	153382
AP	432m SW	Unspecified Tank	1983	146301
EW	432m W	Tanks	1960	109216
H	432m N	Unspecified Tank	1983 - 1987	141058
H	433m N	Tanks	1959	133417
FB	434m SW	Unspecified Tank	1959	144968
FB	435m SW	Unspecified Tank	1958	150422
FB	435m SW	Unspecified Tank	1994	139445
ES	435m N	Tanks	1959	147645
EW	435m W	Tanks	1974	109220
FB	436m SW	Unspecified Tank	1983	141114
EK	437m SW	Unspecified Tank	1959 - 1961	147032
EK	438m SW	Unspecified Tank	1983	143128
EK	439m SW	Unspecified Tank	1974	135308



ID	Location	Land use	Dates present	Group ID
EK	439m SW	Unspecified Tank	1958	150552
EL	439m N	Unspecified Tank	1993	128955
EL	439m N	Unspecified Tank	1993	155435
EL	440m N	Unspecified Tank	1968 - 1978	140969
EL	440m N	Unspecified Tank	1987	132847
H	441m N	Tanks	1960 - 1987	152588
H	442m N	Tanks	1959	148581
H	444m N	Tanks	1960	154270
H	444m N	Tanks	1959	137257
EM	444m NW	Tanks	1974 - 1993	138269
ET	444m N	Unspecified Tank	1978 - 1993	138545
H	444m N	Tanks	1983 - 1987	139643
EY	445m NW	Tanks	1959	154619
EY	446m NW	Tanks	1960	133441
EK	446m SW	Tanks	1958 - 1974	152476
H	446m N	Unspecified Tank	1983 - 1987	133159
ES	448m N	Unspecified Tank	1983 - 1993	142727
ES	449m N	Unspecified Tank	1983 - 1987	154876
H	449m N	Tanks	1993	129175
ES	449m N	Tanks	1959	154787
EK	451m SW	Unspecified Tank	1974 - 1983	135120
EY	452m NW	Unspecified Tank	1974 - 1993	149654
EV	452m N	Tanks	1993	140918
H	452m N	Tanks	1983 - 1987	129114
EM	453m W	Unspecified Tank	1960	126937
EM	453m W	Unspecified Tank	1974	131487
EM	453m W	Unspecified Tank	1958	146911
EV	453m N	Tanks	1987	149701



ID	Location	Land use	Dates present	Group ID
EV	453m N	Tanks	1968	130954
H	455m N	Tanks	1959	128271
FF	457m N	Tanks	1993	148171
AP	457m SW	Unspecified Tank	1959	138682
AP	458m SW	Unspecified Tank	1958	155074
FF	458m N	Tanks	1968 - 1987	146333
AP	459m SW	Unspecified Tank	1994	140304
AP	459m SW	Unspecified Tank	1983	146897
55	461m S	Unspecified Tank	1958 - 1994	142840
H	463m N	Unspecified Tank	1959	151528
H	463m N	Unspecified Tank	1983 - 1987	150447
EW	464m W	Tanks	1974	109222
FH	465m N	Unspecified Tank	1993	134060
FH	466m N	Unspecified Tank	1978	142157
EK	469m SW	Tanks	1958 - 1974	136179
EK	470m SW	Tanks	1983	134202
ES	470m N	Tanks	1960	112297
ES	470m N	Tank (Fuel)	1959	112845
EW	472m W	Unspecified Tank	1958	127616
EW	472m W	Unspecified Tank	1974	136504
EM	473m NW	Unspecified Tank	1974 - 1993	153249
FI	474m N	Unspecified Tank	1993	150847
EK	474m SW	Unspecified Tank	1983	116670
FI	475m N	Unspecified Tank	1993	139824
ES	475m N	Unspecified Tank	1959	125933
FI	475m N	Unspecified Tank	1987	138055
EY	475m NW	Tanks	1959	155191
FI	475m N	Unspecified Tank	1978	146101



ID	Location	Land use	Dates present	Group ID
EM	475m NW	Unspecified Tank	1958	137289
EK	476m SW	Unspecified Tank	1983	116672
EY	476m NW	Unspecified Tank	1959	125106
EY	476m NW	Tanks	1974	148752
EY	476m NW	Unspecified Tank	1993	125108
EM	477m NW	Tanks	1993	135780
EY	477m NW	Tanks	1974	141778
EM	478m NW	Tanks	1974	138805
H	479m N	Tanks	1959 - 1960	148618
EK	480m SW	Tanks	1983	109210
EY	480m NW	Tanks	1959	151915
H	483m N	Tanks	1959	136916
H	483m N	Tanks	1960 - 1983	129476
EK	484m SW	Tanks	1958 - 1983	144449
EK	484m SW	Unspecified Tank	1974 - 1983	133597
EY	485m NW	Tanks	1974	142632
FF	486m N	Tanks	1993	148477
FF	486m N	Tanks	1968	142251
FF	487m N	Tanks	1987	140420
EK	487m SW	Tanks	1974 - 1983	143018
EK	491m SW	Unspecified Tank	1974 - 1983	132771
FJ	491m SW	Unspecified Tank	1959	147359
FJ	491m SW	Unspecified Tank	1994	135193
FJ	491m SW	Unspecified Tank	1958	154144
FJ	492m SW	Unspecified Tank	1983	134751
57	493m W	Unspecified Tank	1959 - 1961	132150
EV	496m N	Tanks	1993	153082
58	496m W	Tanks	1985 - 1993	137313



ID	Location	Land use	Dates present	Group ID
FK	499m SW	Tanks	1993	127421
FK	499m SW	Tanks	1959 - 1961	144128
FK	499m SW	Tanks	1974	128763
FK	499m SW	Tanks	1958	131228
FK	500m SW	Tanks	1983 - 1987	148699
EW	500m W	Tanks	1974	109221

This data is sourced from Ordnance Survey® / Groundsure.

1.3 Historical energy features

Records within 500m

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Energy features digitised from historical Ordnance Survey® mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 14 >](#)

ID	Location	Land use	Dates present	Group ID
17	On site	Electricity Substation	1982 - 1993	83150
18	On site	Electricity Substation	1987 - 1993	83538
D	On site	Electricity Substation	1993	84302
V	On site	Electricity Substation	1980	77377
V	On site	Electricity Substation	1993	87110
BA	On site	Electricity Substation	1983	79347
BA	On site	Electricity Substation	1993	84414
AZ	On site	Electricity Substation	1976	71239
AZ	On site	Electricity Substation	1993	89749
AZ	On site	Electricity Substation	1993	90523
AY	2m N	Electricity Substation	1976	85356
AY	3m N	Electricity Substation	1983	78100



ID	Location	Land use	Dates present	Group ID
AY	4m N	Electricity Substation	1993 - 1994	81671
BP	36m N	Electricity Substation	1993	64981
BP	39m N	Electricity Substation	1987	64509
BP	53m N	Electricity Substation	1987 - 1993	69397
BR	60m N	Electricity Substation	1983 - 1993	79337
CF	130m NW	Industrial Gases Factory	1974	68332
35	134m N	Electricity Substation	1983 - 1993	70296
DB	216m N	Electricity Substation	1983 - 1993	69838
DH	244m E	Electricity Substation	1978	82338
DH	245m E	Electricity Substation	1992	72538
DN	269m E	Electricity Substation	1978	85303
DN	269m E	Electricity Substation	1992	76862
42	281m N	Electricity Substation	1983 - 1993	86806
43	286m E	Electricity Generator Station	1984 - 1987	92196
44	287m SW	Electricity Substation	1983	64970
DS	289m N	Electricity Substation	1987 - 1993	79873
CF	306m NW	Electricity Substation	1974 - 1993	86271
45	306m N	Electricity Substation	1983 - 1993	86753
DX	309m E	Electricity Substation	1978	79082
DX	309m E	Electricity Substation	1992	80545
EM	380m NW	Electricity Substation	1974	64969
EM	389m NW	Electricity Substation	1993	64963
50	391m E	Gas Governor	1992	68026
EQ	393m N	Electricity Substation	1987 - 1993	92184
ET	415m N	Electricity Substation	1978 - 1993	72940
EZ	433m E	Electricity Generating Station	1984	70932
EZ	433m E	Electricity Generating Station	1991 - 1992	77168
EZ	433m E	Electric Generating Station	1992	68249



ID	Location	Land use	Dates present	Group ID
53	434m S	Electricity Substation	1986	66319
56	492m NE	Electricity Substation	1978	83205
FL	499m E	Electricity Substation	1978	91056
FL	499m E	Electricity Substation	1992	78235

This data is sourced from Ordnance Survey® / Groundsure.

1.4 Historical petrol stations

Records within 500m

1

Petrol stations digitised from historical Ordnance Survey® mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 14 >](#)

ID	Location	Land use	Dates present	Group ID
ES	470m N	Tank (Fuel)	1959	1599

This data is sourced from Ordnance Survey® / Groundsure.

1.5 Historical garages

Records within 500m

2

Garages digitised from historical Ordnance Survey® mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 14 >](#)

ID	Location	Land use	Dates present	Group ID
DG	238m SE	Garage	1963 - 1982	25249
DG	246m SE	Garage	1993	26197

This data is sourced from Ordnance Survey® / Groundsure.



1.6 Historical military land

Records within 500m

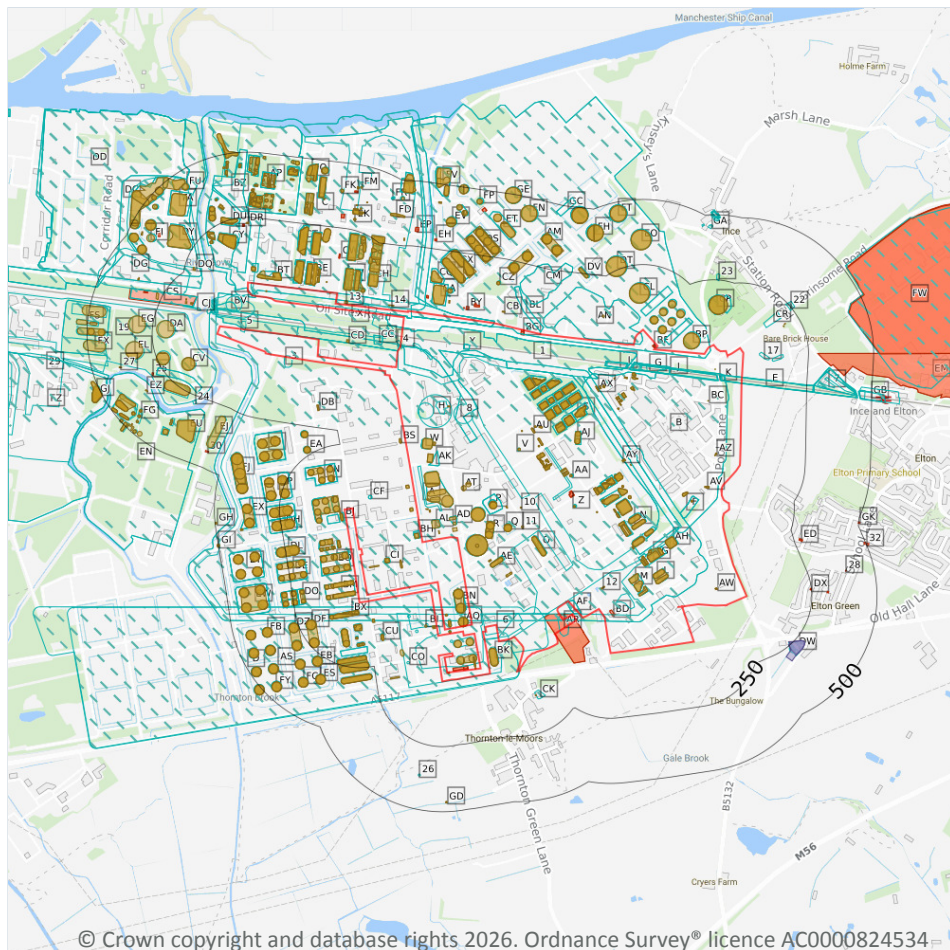
0

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

This data is sourced from Ordnance Survey® / Groundsure / other sources.



2 Past land use - un-grouped



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features
- Historical petrol stations
- Historical garages

2.1 Historical industrial land uses

Records within 500m

666

Potentially contaminative land use features digitised from historical Ordnance Survey® mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 74 >](#)

ID	Location	Land Use	Date	Group ID
1	On site	Mineral Railway Sidings	1967	909464
2	On site	Unspecified Pit	1967	831117
3	On site	Unspecified Pit	1967	831181



ID	Location	Land Use	Date	Group ID
4	On site	Unspecified Heap	1953	844213
5	On site	Unspecified Heap	1953	844260
6	On site	Unspecified Works	1983	941641
7	On site	Cuttings	1938	937581
8	On site	Unspecified Mill	1897	826287
A	On site	Oil Refinery	1978	885162
A	On site	Unspecified Tanks	1990	925123
A	On site	Unspecified Works	1967	992690
A	On site	Unspecified Ground Workings	1967	816353
A	On site	Unspecified Tanks	1978	925784
A	On site	Oil Refinery	1990	982211
B	On site	Research Centre	1978	859525
B	On site	Research Centre	1990	859526
C	On site	Unspecified Commercial/Industrial	1978	967698
C	On site	Unspecified Commercial/Industrial	1990	989346
D	On site	Unspecified Depot	1983	958333
E	On site	Cuttings	1949	874235
E	On site	Cuttings	1908	948045
E	On site	Cuttings	1897	948045
F	On site	Cuttings	1990	897636
F	On site	Cuttings	1967	881562
F	On site	Unspecified Pit	1978	831118
G	On site	Cuttings	1990	887451
G	On site	Cuttings	1967	880923
G	On site	Cuttings	1978	880923
H	On site	Pumping Mill	1938	863140
H	On site	Pumping Mill	1912	894243
H	On site	Pumping Mill	1912	1009788



ID	Location	Land Use	Date	Group ID
I	On site	Cuttings	1908	922696
I	On site	Cuttings	1953	989569
I	On site	Cuttings	1908	963759
I	On site	Cuttings	1938	922696
I	On site	Cuttings	1938	941275
J	On site	Cuttings	1953	885045
J	On site	Cuttings	1908	973354
J	On site	Cuttings	1897	961005
J	On site	Cuttings	1938	973354
K	On site	Cuttings	1953	906474
L	On site	Unspecified Tanks	1990	950552
L	On site	Unspecified Tanks	1978	993772
M	On site	Unspecified Tanks	1990	922276
M	On site	Unspecified Tanks	1990	1000917
M	On site	Unspecified Tanks	1978	870038
M	On site	Unspecified Tanks	1978	896503
N	On site	Unspecified Tanks	1990	860205
N	On site	Unspecified Tanks	1990	994277
N	On site	Unspecified Tanks	1990	979676
N	On site	Unspecified Tanks	1990	886998
N	On site	Unspecified Tanks	1990	862052
N	On site	Unspecified Tanks	1990	968583
N	On site	Unspecified Tanks	1990	916688
N	On site	Unspecified Tanks	1990	876506
N	On site	Unspecified Tank	1967	851525
N	On site	Unspecified Tanks	1967	945929
N	On site	Unspecified Tanks	1967	1003662
N	On site	Unspecified Tanks	1967	904056



ID	Location	Land Use	Date	Group ID
N	On site	Unspecified Tanks	1978	945929
N	On site	Unspecified Tanks	1978	1003662
N	On site	Unspecified Tanks	1978	861385
N	On site	Unspecified Tanks	1978	921488
N	On site	Unspecified Tanks	1978	903212
N	On site	Unspecified Tanks	1978	970324
N	On site	Unspecified Tanks	1978	967618
N	On site	Unspecified Tanks	1978	981347
O	On site	Unspecified Tanks	1990	987681
O	On site	Unspecified Tanks	1978	874362
P	On site	Unspecified Tank	1990	992422
P	On site	Unspecified Heap	1990	896536
P	On site	Unspecified Tank	1967	989000
P	On site	Unspecified Heap	1967	967741
P	On site	Unspecified Tank	1978	989000
P	On site	Unspecified Heap	1978	967741
Q	On site	Unspecified Tank	1990	903493
Q	On site	Unspecified Tank	1967	1008653
Q	On site	Unspecified Tank	1978	1008653
R	On site	Unspecified Tanks	1990	956864
R	On site	Unspecified Tanks	1967	866504
R	On site	Unspecified Tanks	1978	866504
R	On site	Unspecified Tanks	1978	866504
S	On site	Unspecified Tanks	1990	992615
S	On site	Unspecified Tanks	1967	966325
S	On site	Unspecified Tanks	1978	966325
T	On site	Unspecified Tanks	1990	992615
T	On site	Unspecified Tanks	1990	866224



ID	Location	Land Use	Date	Group ID
T	On site	Unspecified Tanks	1967	905732
T	On site	Unspecified Tanks	1967	966325
T	On site	Unspecified Tanks	1978	966325
T	On site	Unspecified Tanks	1978	980150
U	On site	Unspecified Tanks	1990	999865
U	On site	Unspecified Tanks	1990	947005
U	On site	Unspecified Tanks	1990	929637
U	On site	Unspecified Tanks	1990	929637
U	On site	Unspecified Tanks	1990	987329
U	On site	Unspecified Tanks	1990	907250
U	On site	Unspecified Tanks	1990	960824
U	On site	Unspecified Tanks	1990	1009800
U	On site	Unspecified Tanks	1990	982962
U	On site	Unspecified Tanks	1990	982962
U	On site	Unspecified Tanks	1990	996734
U	On site	Unspecified Tanks	1990	980081
U	On site	Unspecified Tanks	1990	965145
U	On site	Unspecified Tanks	1967	876263
U	On site	Unspecified Tanks	1967	916815
U	On site	Unspecified Tanks	1967	998734
U	On site	Unspecified Tanks	1967	967850
U	On site	Unspecified Tanks	1967	979469
U	On site	Unspecified Tanks	1967	979469
U	On site	Unspecified Tanks	1967	973629
U	On site	Unspecified Tanks	1967	935623
U	On site	Unspecified Tanks	1967	952578
U	On site	Unspecified Tanks	1967	996429
U	On site	Unspecified Tanks	1967	983176



ID	Location	Land Use	Date	Group ID
U	On site	Unspecified Tanks	1967	935463
U	On site	Unspecified Tanks	1967	935463
U	On site	Unspecified Tanks	1978	935623
U	On site	Unspecified Tanks	1978	973629
U	On site	Unspecified Tanks	1978	979469
U	On site	Unspecified Tanks	1978	979469
U	On site	Unspecified Tanks	1978	876263
U	On site	Unspecified Tanks	1978	916815
U	On site	Unspecified Tanks	1978	998734
U	On site	Unspecified Tanks	1978	967850
U	On site	Unspecified Tanks	1978	935463
U	On site	Unspecified Tanks	1978	935463
U	On site	Unspecified Tanks	1978	983176
U	On site	Unspecified Tanks	1978	996429
U	On site	Unspecified Tanks	1978	952578
V	On site	Unspecified Tank	1990	898790
V	On site	Unspecified Tank	1967	974133
V	On site	Unspecified Tank	1978	974133
W	On site	Unspecified Tanks	1990	876771
W	On site	Unspecified Tanks	1967	862099
W	On site	Unspecified Tanks	1978	862099
X	On site	Railway Sidings	1990	945182
X	On site	Unspecified Heap	1953	844258
X	On site	Railway Sidings	1978	910223
Y	On site	Railway Station	1990	900029
Y	On site	Railway Station	1967	973504
Y	On site	Railway Station	1978	973504
Z	On site	Unspecified Tank	1990	880550



ID	Location	Land Use	Date	Group ID
Z	On site	Unspecified Tank	1967	896790
Z	On site	Unspecified Tank	1978	876408
AA	On site	Unspecified Tank	1990	947073
AA	On site	Unspecified Ground Workings	1967	816352
AA	On site	Unspecified Tank	1978	978756
AB	On site	Unspecified Tank	1990	921800
AB	On site	Unspecified Tank	1967	872416
AB	On site	Unspecified Tank	1978	872416
AC	On site	Unspecified Tank	1990	1007837
AC	On site	Unspecified Tank	1967	941564
AC	On site	Unspecified Tank	1978	941564
AD	On site	Unspecified Tanks	1990	944579
AD	On site	Unspecified Tanks	1978	903472
AE	On site	Unspecified Tanks	1990	946684
AE	On site	Unspecified Tanks	1978	886866
AF	On site	Unspecified Pit	1990	983026
AF	On site	Unspecified Pit	1967	879083
AF	On site	Unspecified Pit	1978	879083
AG	On site	Unspecified Tanks	1990	880934
AG	On site	Unspecified Tanks	1978	929347
AH	On site	Unspecified Tanks	1990	915905
AH	On site	Unspecified Tanks	1978	972965
AI	On site	Unspecified Tanks	1990	903694
AI	On site	Unspecified Tanks	1978	971472
AJ	On site	Unspecified Tanks	1990	917048
AJ	On site	Unspecified Tanks	1978	909490
AK	On site	Unspecified Pit	1990	864677
AK	On site	Unspecified Pit	1978	925680



ID	Location	Land Use	Date	Group ID
AL	On site	Unspecified Tanks	1990	911688
AL	On site	Unspecified Tanks	1978	861239
AM	On site	Unspecified Commercial/Industrial	1990	877579
AM	On site	Unspecified Commercial/Industrial	1978	977550
AN	On site	Unspecified Heaps	1967	971237
AN	On site	Unspecified Heaps	1978	971237
AO	On site	Unspecified Commercial/Industrial	1967	867150
AP	On site	Mineral Railway Sidings	1967	858663
AQ	On site	Unspecified Tank	1967	930835
AQ	On site	Unspecified Tank	1967	850284
AQ	On site	Mineral Railway Sidings	1967	909464
AQ	On site	Unspecified Tank	1983	930835
AR	On site	Unspecified Heaps	1967	837954
AS	On site	Unspecified Depot	1967	879945
BH	4m W	Unspecified Tanks	1990	964295
BH	4m W	Unspecified Tanks	1978	995256
AQ	6m W	Unspecified Tanks	1967	819454
BJ	6m W	Unspecified Tanks	1990	958087
BJ	6m W	Unspecified Tanks	1978	912714
AQ	8m W	Unspecified Tanks	1967	819456
BL	9m N	Unspecified Heap	1967	917792
BL	9m N	Unspecified Heap	1978	917792
AQ	9m N	Unspecified Tanks	1967	977250
AQ	9m N	Unspecified Tanks	1983	977250
BH	9m W	Unspecified Tanks	1967	1002523
BM	10m W	Unspecified Tanks	1990	941445
BM	10m W	Unspecified Tanks	1967	896928
BM	10m W	Unspecified Tanks	1978	896928



ID	Location	Land Use	Date	Group ID
BK	12m E	Unspecified Tanks	1983	819857
BN	12m W	Unspecified Tanks	1990	916073
BN	12m W	Unspecified Tanks	1967	864141
BN	12m W	Unspecified Tanks	1978	864141
BO	13m W	Unspecified Tanks	1990	978569
BO	13m W	Unspecified Tanks	1967	994160
BO	13m W	Unspecified Tanks	1978	994160
AQ	13m E	Unspecified Tank	1983	850287
BJ	13m W	Unspecified Tanks	1967	894144
BP	17m N	Unspecified Tank	1990	908199
BP	17m N	Unspecified Tank	1978	974135
BE	18m N	Unspecified Tanks	1990	915774
BE	18m N	Unspecified Tanks	1967	889275
BE	18m N	Unspecified Tanks	1978	889275
BE	19m N	Unspecified Tanks	1967	977552
BE	19m N	Unspecified Tanks	1978	977552
BJ	20m W	Unspecified Tanks	1990	896826
BJ	20m W	Unspecified Tanks	1967	954377
BJ	20m W	Unspecified Tanks	1978	954377
BE	22m N	Unspecified Tanks	1990	912023
BU	23m N	Cuttings	1990	971762
BU	23m N	Cuttings	1978	943632
BT	24m N	Unspecified Tanks	1967	954159
BT	25m N	Unspecified Tanks	1990	938671
BT	25m N	Unspecified Tanks	1978	961835
AQ	25m S	Chimney	1983	853222
BJ	26m W	Unspecified Pit	1990	912948
BJ	26m W	Unspecified Pit	1978	899249



ID	Location	Land Use	Date	Group ID
16	28m W	Unspecified Heap	1953	844259
BV	29m SW	Unspecified Old Wharf	1938	937123
BW	29m NE	Unspecified Tanks	1967	885184
BW	29m NE	Unspecified Tanks	1978	885184
BW	32m NE	Unspecified Tanks	1990	885975
BI	32m W	Unspecified Tank	1983	850286
BX	33m S	Unspecified Tanks	1990	972299
BX	33m S	Unspecified Tanks	1967	883565
BX	33m S	Unspecified Tanks	1978	883565
BZ	39m N	Railway Sidings	1990	957265
BZ	39m N	Railway Sidings	1978	952198
CA	39m N	Unspecified Tanks	1990	933105
CA	39m N	Unspecified Tanks	1978	988895
BU	40m NE	Unspecified Tank	1990	986257
BU	40m NE	Unspecified Tank	1967	993051
BU	40m NE	Unspecified Tank	1978	993051
BO	41m W	Unspecified Tanks	1990	953791
BO	41m W	Unspecified Tanks	1967	1005703
BO	41m W	Unspecified Tanks	1978	1005703
BU	41m NE	Unspecified Tank	1990	860852
BU	41m NE	Unspecified Tank	1967	940681
BU	41m NE	Unspecified Tank	1978	940681
BX	43m S	Unspecified Tanks	1967	883565
BX	43m S	Unspecified Tanks	1983	999037
BV	43m SW	Unspecified Old Wharf	1912	943315
BT	43m N	Unspecified Tanks	1990	869082
BT	43m N	Unspecified Tanks	1978	992027
BW	45m E	Unspecified Tanks	1990	942120

ID	Location	Land Use	Date	Group ID
BW	45m E	Unspecified Tanks	1967	966927
BW	45m E	Unspecified Tanks	1978	966927
BV	48m N	Unspecified Old Wharf	1929	975409
BV	51m N	Unspecified Old Wharf	1913	975409
BV	51m N	Unspecified Old Wharf	1913	975409
BU	54m N	Cuttings	1990	879890
BU	54m N	Cuttings	1978	963017
BV	55m NW	Unspecified Wharf	1894	848639
BJ	57m W	Unspecified Tanks	1990	991435
BJ	57m W	Unspecified Tanks	1967	928893
BJ	57m W	Unspecified Tanks	1978	928893
BW	57m N	Unspecified Tanks	1990	904411
BW	57m N	Unspecified Tanks	1967	928770
BW	57m N	Unspecified Tanks	1978	928770
BW	58m N	Unspecified Tank	1990	919626
BW	58m N	Unspecified Tank	1978	942834
BW	58m N	Unspecified Tank	1967	958612
17	62m E	Unspecified Tank	1968	851440
CC	66m NW	Railway Building	1990	967373
CC	66m NW	Railway Building	1978	879486
BV	68m N	Unspecified Old Wharf	1912	958104
BV	68m N	Unspecified Old Wharf	1912	958104
BO	70m W	Unspecified Tanks	1990	893698
BO	70m W	Unspecified Tanks	1967	959920
BO	70m W	Unspecified Tanks	1978	959920
CF	74m NE	Chimney	1990	936651
CF	74m NE	Chimney	1978	939911
BI	74m W	Chimney	1983	853220

ID	Location	Land Use	Date	Group ID
18	79m S	Chimney	1983	853223
BX	81m S	Unspecified Tanks	1967	948438
BX	81m S	Unspecified Tanks	1983	948438
CH	84m N	Unspecified Tanks	1990	890534
CH	84m N	Unspecified Tanks	1967	961314
CH	84m N	Unspecified Tanks	1978	961314
CI	88m E	Unspecified Tanks	1990	949233
CI	88m E	Unspecified Tanks	1967	894859
CI	88m E	Unspecified Tanks	1978	894859
19	88m SW	Unspecified Commercial/Industrial	1978	911971
BU	89m NE	Unspecified Tank	1990	929173
BU	89m NE	Unspecified Tank	1978	883497
CA	90m N	Unspecified Tank	1990	910011
CA	90m N	Unspecified Tank	1978	975003
BU	91m NE	Unspecified Tank	1990	889256
BU	91m NE	Unspecified Tank	1978	903325
CJ	96m NW	Unspecified Old Wharf	1897	844441
CK	100m SE	Telephone Exchange	1983	847401
CL	105m N	Unspecified Tank	1990	917952
CL	105m N	Unspecified Tank	1978	927408
CM	106m N	Unspecified Heaps	1967	885758
CM	106m N	Unspecified Heaps	1978	885758
CN	112m N	Unspecified Tanks	1990	916194
CN	112m N	Unspecified Tanks	1967	869878
CN	112m N	Unspecified Tanks	1978	869878
20	112m E	Unspecified Tanks	1968	819850
BX	115m SW	Unspecified Tanks	1967	964504
BX	115m SW	Unspecified Tanks	1983	964504



ID	Location	Land Use	Date	Group ID
CO	115m W	Chimney	1983	853221
CP	118m N	Unspecified Tank	1990	983742
CP	118m N	Unspecified Tank	1967	936830
CP	118m N	Unspecified Tank	1978	936830
CQ	120m N	Unspecified Tanks	1990	933105
CQ	120m N	Unspecified Tanks	1978	988895
CR	127m NE	Cuttings	1990	808205
CS	127m NW	Unspecified Factory	1990	915682
CS	127m NW	Unspecified Factory	1978	865303
BX	129m S	Unspecified Tank	1967	991066
BX	129m S	Unspecified Tank	1983	991066
CT	130m N	Unspecified Tanks	1990	941453
CT	130m N	Unspecified Tanks	1967	947533
CT	130m N	Unspecified Tanks	1978	947533
CU	131m S	Unspecified Tanks	1967	977085
CU	131m S	Unspecified Tanks	1983	977085
CP	132m NE	Unspecified Heap	1990	947086
CP	132m NE	Unspecified Heap	1968	894039
CV	133m SW	Unspecified Tank	1978	851442
CH	133m N	Unspecified Tanks	1990	935791
CH	133m N	Unspecified Tanks	1967	950682
CH	133m N	Unspecified Tanks	1978	950682
BU	133m N	Unspecified Tank	1990	904520
BU	133m N	Unspecified Tank	1978	944642
CX	136m N	Unspecified Tanks	1990	961559
CX	136m N	Unspecified Tanks	1967	998268
CX	136m N	Unspecified Tanks	1978	998268
CT	137m N	Unspecified Tanks	1990	879099



ID	Location	Land Use	Date	Group ID
CT	137m N	Unspecified Tanks	1967	928952
CT	137m N	Unspecified Tanks	1978	928952
BU	137m NE	Unspecified Tank	1990	946619
BU	137m NE	Unspecified Tank	1978	927313
CH	139m N	Unspecified Tanks	1990	1006938
CH	139m N	Unspecified Tanks	1967	1006511
CH	139m N	Unspecified Tanks	1978	1006511
CY	143m N	Unspecified Tanks	1967	903866
CY	145m N	Unspecified Tanks	1990	978422
CY	145m N	Unspecified Tanks	1978	895466
CZ	150m N	Unspecified Tank	1990	961503
CZ	150m N	Unspecified Tank	1978	896941
BX	152m S	Unspecified Tanks	1967	983993
BX	152m S	Unspecified Tanks	1983	983993
CH	157m NE	Unspecified Tank	1990	1005653
CH	157m NE	Unspecified Tank	1967	983429
CH	157m NE	Unspecified Tank	1978	983429
DA	162m W	Unspecified Tank	1978	851467
DC	164m NW	Unspecified Commercial/Industrial	1990	872159
DC	164m NW	Unspecified Commercial/Industrial	1978	909867
BX	171m S	Unspecified Pit	1967	995981
BX	171m S	Unspecified Pit	1983	995981
DC	181m W	Unspecified Depot	1967	869671
DD	181m W	Mineral Railway Sidings	1967	896468
DE	182m W	Unspecified Tanks	1990	964653
DE	182m W	Unspecified Tanks	1967	954429
DE	182m W	Unspecified Tanks	1978	954429
DF	185m SW	Unspecified Tank	1967	894360



ID	Location	Land Use	Date	Group ID
DF	185m SW	Unspecified Tank	1983	894360
DG	186m NW	Bus Station	1967	857000
CH	187m N	Unspecified Tanks	1990	963092
CH	187m N	Unspecified Tanks	1967	906837
CH	187m N	Unspecified Tanks	1978	906837
CH	187m NE	Unspecified Tanks	1990	952537
CH	187m NE	Unspecified Tanks	1967	1007787
CH	187m NE	Unspecified Tanks	1978	1007787
CH	189m NE	Unspecified Tanks	1990	946077
CH	189m NE	Unspecified Tanks	1967	869489
CH	189m NE	Unspecified Tanks	1978	869489
DH	190m W	Unspecified Tanks	1990	962638
DH	190m W	Unspecified Tanks	1967	957972
DH	190m W	Unspecified Tanks	1978	957972
DI	190m W	Unspecified Tanks	1990	962638
DI	190m W	Unspecified Tanks	1967	957972
DI	190m W	Unspecified Tanks	1978	957972
DJ	192m SW	Cuttings	1990	882213
DJ	192m SW	Cuttings	1978	892908
DM	199m SW	Unspecified Tank	1978	851465
DL	199m W	Unspecified Tanks	1990	860388
DL	199m W	Unspecified Tanks	1967	929238
DL	199m W	Unspecified Tanks	1978	929238
BX	200m S	Unspecified Tanks	1967	1007269
BX	200m S	Unspecified Tanks	1983	1007269
DN	202m NW	Unspecified Tank	1990	962619
DN	202m NW	Unspecified Tank	1978	939869
DO	205m W	Unspecified Tanks	1990	969275

ID	Location	Land Use	Date	Group ID
DO	205m W	Unspecified Tanks	1967	909445
DO	205m W	Unspecified Tanks	1978	909445
DN	207m NW	Unspecified Tanks	1990	883963
DN	207m NW	Unspecified Tanks	1967	884250
DN	207m NW	Unspecified Tanks	1978	884250
DP	207m W	Unspecified Tanks	1990	924441
DP	207m W	Unspecified Tanks	1967	989649
DP	207m W	Unspecified Tanks	1978	989649
DK	208m N	Unspecified Tank	1990	872624
DK	208m N	Unspecified Tank	1967	920049
DK	208m N	Unspecified Tank	1978	920049
DF	213m SW	Unspecified Tank	1967	1000832
DF	213m SW	Unspecified Tank	1983	1000832
DU	225m N	Unspecified Tanks	1990	942386
DU	225m N	Unspecified Tanks	1978	973871
DT	225m N	Unspecified Tank	1990	918561
DT	225m N	Unspecified Tank	1978	1009937
BX	226m S	Unspecified Tanks	1967	924888
BX	226m S	Unspecified Tanks	1983	924888
DO	229m W	Unspecified Tanks	1990	969275
DO	229m W	Unspecified Tanks	1990	906019
DO	229m W	Unspecified Tanks	1967	909445
DO	229m W	Unspecified Tanks	1967	963430
DO	229m W	Unspecified Tanks	1978	909445
DO	229m W	Unspecified Tanks	1978	963430
DS	229m N	Unspecified Tanks	1990	953231
DS	229m N	Unspecified Tanks	1967	941284
DS	229m N	Unspecified Tanks	1978	941284

ID	Location	Land Use	Date	Group ID
CH	230m NE	Unspecified Tanks	1990	997140
CH	230m NE	Unspecified Tanks	1967	882837
CH	230m NE	Unspecified Tanks	1978	882837
DJ	235m SW	Unspecified Tanks	1978	819875
DV	235m N	Unspecified Tanks	1990	897957
DV	235m N	Unspecified Tanks	1978	993836
DW	241m SE	Garage	1968	874203
DW	241m SE	Garage	1983	874203
22	242m NE	Cuttings	1990	808204
23	247m N	Unspecified Quarry	1953	840714
DW	247m SE	Smithy	1908	893506
DW	247m SE	Smithy	1897	893506
CH	249m NE	Unspecified Tanks	1990	869122
CH	249m NE	Unspecified Tanks	1967	873524
CH	249m NE	Unspecified Tanks	1978	873524
DY	249m NW	Unspecified Tanks	1990	938030
DY	249m NW	Unspecified Tanks	1978	898750
DZ	250m W	Unspecified Tank	1967	970918
DZ	250m W	Unspecified Tank	1983	970918
DW	255m SE	Smithy	1938	908566
EB	257m SW	Unspecified Tank	1967	923318
EB	257m SW	Unspecified Tank	1983	923318
EA	258m NW	Unspecified Tank	1990	969562
EA	258m NW	Unspecified Tank	1967	936603
EA	258m NW	Unspecified Tank	1978	936603
DW	258m SE	Smithy	1908	1000900
DW	259m SE	Smithy	1949	908566
BX	263m W	Unspecified Tanks	1967	931464



ID	Location	Land Use	Date	Group ID
BX	263m W	Unspecified Tanks	1983	931464
DK	263m N	Unspecified Tank	1990	956513
DK	263m N	Unspecified Tank	1967	871501
DK	263m N	Unspecified Tank	1978	871501
24	267m S	Pump House	1978	856916
EC	269m S	Unspecified Tank	1990	930691
EC	269m S	Unspecified Tank	1967	920651
EC	269m S	Unspecified Tank	1978	920651
DZ	270m SW	Unspecified Tank	1967	889371
DZ	270m SW	Unspecified Tank	1983	889371
EF	273m E	Railway Sidings	1938	985056
AP	273m N	Unspecified Works	1967	835924
DU	273m NW	Unspecified Tanks	1990	867394
DU	273m NW	Unspecified Tanks	1967	952969
DU	273m NW	Unspecified Tanks	1978	952969
EG	274m W	Unspecified Tank	1978	851444
EF	276m E	Railway Sidings	1908	868866
EF	276m E	Railway Sidings	1897	868866
EF	278m E	Cuttings	1949	874235
EF	278m E	Railway Sidings	1949	863780
EF	278m E	Railway Sidings	1968	863780
EI	283m S	Unspecified Tanks	1990	976965
EI	283m S	Unspecified Tanks	1967	966130
EI	283m S	Unspecified Tanks	1978	966130
EJ	286m S	Unspecified Tanks	1978	819886
EL	286m W	Unspecified Tank	1978	851443
C	288m N	Unspecified Tanks	1967	1002803
AP	289m N	Unspecified Tanks	1990	887935



ID	Location	Land Use	Date	Group ID
AP	289m N	Unspecified Tanks	1967	937587
AP	289m N	Unspecified Tanks	1978	937587
AP	290m N	Unspecified Tanks	1990	864626
AP	290m N	Unspecified Tanks	1967	924215
AP	290m N	Unspecified Tanks	1978	924215
C	291m N	Unspecified Tanks	1990	977353
C	291m N	Unspecified Tanks	1978	952882
EF	291m E	Railway Sidings	1908	877487
EN	293m S	Unspecified Works	1967	835943
EN	293m S	Unspecified Commercial/Industrial	1978	822648
EQ	308m SW	Unspecified Tank	1967	931053
EQ	308m SW	Unspecified Tank	1983	931053
EO	309m N	Unspecified Tank	1990	876255
EO	309m N	Unspecified Tank	1978	886818
ES	310m SW	Unspecified Tank	1967	986353
ES	310m SW	Unspecified Tank	1983	986353
AM	311m N	Unspecified Tank	1990	885086
AM	311m N	Unspecified Tank	1967	1000702
AM	311m N	Unspecified Tank	1978	1000702
ET	326m N	Unspecified Tanks	1990	900330
ET	326m N	Unspecified Tanks	1978	888840
DU	336m N	Unspecified Tank	1967	966612
DU	337m N	Unspecified Tank	1990	984819
DU	337m N	Unspecified Tank	1978	994761
EU	341m S	Unspecified Tanks	1978	819870
EW	343m W	Unspecified Tanks	1990	961864
EW	343m W	Unspecified Tanks	1967	902059
EW	343m W	Unspecified Tanks	1978	902059



ID	Location	Land Use	Date	Group ID
AM	344m N	Unspecified Tank	1990	923447
AM	344m N	Unspecified Tank	1967	977962
AM	344m N	Unspecified Tank	1978	977962
EX	344m W	Unspecified Tanks	1990	984785
EX	344m W	Unspecified Tanks	1967	954209
EX	344m W	Unspecified Tanks	1978	954209
EY	344m W	Unspecified Tanks	1990	995846
EY	344m W	Unspecified Tanks	1967	999912
EY	344m W	Unspecified Tanks	1978	999912
EV	345m N	Unspecified Tank	1990	928586
EV	345m N	Unspecified Tank	1978	965204
FA	346m NW	Unspecified Tanks	1990	863042
FA	346m NW	Unspecified Tanks	1978	941068
C	349m N	Unspecified Tank	1967	851453
FB	354m W	Unspecified Tank	1967	879484
FB	354m W	Unspecified Tank	1983	879484
FC	354m SW	Unspecified Tank	1967	885317
FC	354m SW	Unspecified Tank	1983	885317
C	355m N	Unspecified Tanks	1990	985922
C	355m N	Unspecified Tanks	1978	887608
FE	365m SW	Unspecified Tanks	1978	819876
26	366m S	Boat House	1897	824551
AP	368m N	Unspecified Tank	1967	942919
AP	368m N	Unspecified Tanks	1990	1009475
AP	368m N	Unspecified Tanks	1967	875811
AP	368m N	Unspecified Tanks	1978	875811
FF	369m SW	Unspecified Tank	1967	934767
FF	369m SW	Unspecified Tank	1983	934767

ID	Location	Land Use	Date	Group ID
FE	371m SW	Unspecified Tank	1967	851521
AP	372m N	Unspecified Tank	1990	861236
AP	372m N	Unspecified Tank	1978	874941
FH	380m N	Unspecified Tank	1990	976006
FH	380m N	Unspecified Tank	1967	931759
FH	380m N	Unspecified Tank	1978	931759
FJ	382m W	Unspecified Tanks	1990	908676
FJ	382m W	Unspecified Tanks	1967	1001676
FJ	382m W	Unspecified Tanks	1978	1001676
FK	385m N	Unspecified Tank	1967	851526
FI	390m NW	Unspecified Tank	1990	1007377
FI	390m NW	Unspecified Tank	1978	909494
FL	392m N	Unspecified Tanks	1990	986587
FL	392m N	Unspecified Tanks	1978	976448
AS	396m SW	Unspecified Tank	1967	881275
AS	396m SW	Unspecified Tank	1983	881275
FH	403m N	Unspecified Tank	1938	940307
FG	404m SW	Unspecified Tanks	1978	997096
FI	405m NW	Unspecified Tanks	1990	1004071
FI	405m NW	Unspecified Tanks	1967	946471
FI	405m NW	Unspecified Tanks	1978	946471
FG	408m SW	Unspecified Tanks	1978	913957
FN	409m N	Unspecified Tank	1990	947463
FN	409m N	Unspecified Tank	1978	889261
AP	409m N	Unspecified Tanks	1990	955880
AP	409m N	Unspecified Tanks	1967	1000763
AP	409m N	Unspecified Tanks	1978	1000763
FO	411m N	Unspecified Tanks	1967	885600



ID	Location	Land Use	Date	Group ID
FE	411m SW	Unspecified Tanks	1967	901417
FE	411m SW	Unspecified Tanks	1978	901417
FG	412m SW	Unspecified Tanks	1967	913957
FI	412m NW	Unspecified Tank	1990	950053
FI	412m NW	Unspecified Tank	1978	882486
FG	412m SW	Unspecified Tanks	1967	883595
FM	414m N	Unspecified Tank	1967	851527
FQ	416m W	Unspecified Tank	1967	933823
FQ	416m W	Unspecified Tank	1983	933823
FR	416m NE	Unspecified Tank	1967	851439
FO	417m N	Unspecified Tanks	1990	985118
FO	417m N	Unspecified Tanks	1978	902119
FS	419m W	Unspecified Ground Workings	1967	816297
FS	419m W	Unspecified Depot	1967	821420
AP	419m N	Unspecified Tanks	1990	880212
AP	419m N	Unspecified Tanks	1967	905886
AP	419m N	Unspecified Tanks	1978	905886
FR	421m NE	Chimney	1990	968896
FR	421m NE	Chimney	1978	901995
AP	421m N	Unspecified Tanks	1990	955880
AP	421m N	Unspecified Tanks	1967	1000763
AP	421m N	Unspecified Tanks	1978	1000763
FT	423m N	Unspecified Tank	1990	865908
FT	423m N	Unspecified Tank	1967	859929
FT	423m N	Unspecified Tank	1978	859929
FR	424m N	Unspecified Tank	1990	950105
FR	424m N	Unspecified Tank	1967	866659
FR	424m N	Unspecified Tank	1978	866659

ID	Location	Land Use	Date	Group ID
FU	425m NW	Unspecified Tank	1990	887073
FU	425m NW	Unspecified Tank	1978	929356
FO	426m N	Unspecified Tanks	1967	866169
FO	430m N	Unspecified Tanks	1990	946395
FO	430m N	Unspecified Tanks	1978	894331
FS	430m W	Unspecified Tanks	1967	906845
FS	430m W	Unspecified Tanks	1978	906845
FW	430m E	Electric Generating Station	1990	817360
D	431m SW	Unspecified Tank	1967	873071
D	431m SW	Unspecified Tank	1983	873071
FS	431m W	Unspecified Tanks	1978	819874
FX	432m W	Unspecified Tanks	1978	819855
29	432m W	Mineral Railway Sidings	1967	960753
FY	432m SW	Unspecified Tank	1967	874547
FY	432m SW	Unspecified Tank	1983	874547
FH	440m N	Unspecified Tank	1990	981398
FH	440m N	Unspecified Tank	1967	860116
FH	440m N	Unspecified Tank	1978	860116
AP	440m N	Unspecified Tanks	1990	940551
AP	440m N	Unspecified Tanks	1978	916332
AP	441m N	Unspecified Tanks	1967	998823
FP	444m N	Unspecified Tank	1990	961735
FP	444m N	Unspecified Tank	1978	896131
FU	446m NW	Unspecified Tanks	1967	819872
FZ	446m W	Unspecified Works	1990	990101
FZ	446m W	Unspecified Works	1978	893150
GA	447m N	Smithy	1897	833060
FU	447m NW	Unspecified Tank	1990	990291

ID	Location	Land Use	Date	Group ID
FU	447m NW	Unspecified Tank	1978	1006446
GB	449m E	Cuttings	1938	869934
FR	449m N	Unspecified Tanks	1990	960196
FR	449m N	Unspecified Tanks	1967	968391
FR	449m N	Unspecified Tanks	1978	968391
GB	450m E	Cuttings	1949	1004913
FO	451m N	Unspecified Tank	1990	875507
FO	451m N	Unspecified Tank	1978	893142
GB	452m E	Cuttings	1908	869934
GB	453m E	Cuttings	1897	906155
31	453m W	Unspecified Works	1967	930073
FV	456m N	Unspecified Tanks	1990	905927
FV	456m N	Unspecified Tanks	1967	863820
FV	456m N	Unspecified Tanks	1978	863820
GA	457m N	Smithy	1894	833059
FS	457m W	Unspecified Tanks	1978	819888
D	458m SW	Unspecified Tank	1967	888907
D	458m SW	Unspecified Tank	1983	888907
GC	458m N	Cuttings	1990	921959
GC	458m N	Cuttings	1978	898732
DD	461m NW	Railway Sidings	1990	893703
DD	461m NW	Railway Sidings	1978	933095
GE	465m N	Unspecified Tank	1990	995572
GE	465m N	Unspecified Tank	1978	891868
FI	468m NW	Unspecified Tank	1990	967604
FI	468m NW	Unspecified Tank	1978	890115
FU	470m NW	Unspecified Tanks	1990	908265
FU	470m NW	Unspecified Tanks	1978	983678



ID	Location	Land Use	Date	Group ID
FO	471m N	Unspecified Tanks	1967	819864
GA	475m N	Smithy	1913	952986
FU	476m NW	Unspecified Tanks	1967	916074
GF	477m N	Unspecified Tank	1990	994955
GF	477m N	Unspecified Tank	1978	929848
FG	482m SW	Unspecified Tank	1978	851452
AP	482m N	Unspecified Tanks	1990	969361
AP	482m N	Unspecified Tanks	1967	967824
AP	482m N	Unspecified Tanks	1978	967824
FG	483m SW	Unspecified Tanks	1978	819863
GA	483m N	Smithy	1908	952986
GA	485m N	Smithy	1953	885974
GA	485m N	Smithy	1908	901282
GA	487m N	Smithy	1938	885974
GG	490m SW	Unspecified Tank	1967	924838
GG	490m SW	Unspecified Tank	1983	924838
GJ	497m SW	Unspecified Tanks	1990	866784
GJ	497m SW	Unspecified Tanks	1967	978092
GJ	497m SW	Unspecified Tanks	1978	978092

This data is sourced from Ordnance Survey® / Groundsure.

2.2 Historical tanks

Records within 500m

1407

Tank features digitised from historical Ordnance Survey® mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 74 >](#)

ID	Location	Land Use	Date	Group ID
9	On site	Unspecified Tank	1983	125911



ID	Location	Land Use	Date	Group ID
10	On site	Unspecified Tank	1993	116380
11	On site	Unspecified Tank	1993	116381
12	On site	Tanks	1993	111817
A	On site	Tanks	1993	126630
A	On site	Tanks	1993	143524
A	On site	Tanks	1993	152842
A	On site	Tanks	1993	135845
A	On site	Tanks	1986	141910
A	On site	Unspecified Tank	1986	116385
A	On site	Tanks	1986	135845
A	On site	Tanks	1986	141910
A	On site	Tanks	1986	145199
A	On site	Tanks	1986	144650
A	On site	Unspecified Tank	1986	116386
A	On site	Unspecified Tank	1986	116387
F	On site	Tanks	1993	133590
F	On site	Unspecified Tank	1993	137019
F	On site	Tanks	1980	133590
F	On site	Unspecified Tank	1980	137019
F	On site	Unspecified Tank	1993	137019
F	On site	Tanks	1993	133590
H	On site	Tanks	1993	148013
H	On site	Tanks	1986	150804
I	On site	Unspecified Tank	1970	118321
I	On site	Tanks	1970	131468
I	On site	Tanks	1970	130415
I	On site	Tanks	1970	127124
I	On site	Tanks	1970	144143



ID	Location	Land Use	Date	Group ID
I	On site	Tanks	1970	141558
I	On site	Tanks	1970	136180
I	On site	Tanks	1970	148234
I	On site	Unspecified Tank	1970	138217
I	On site	Unspecified Tank	1970	126297
I	On site	Tanks	1990	147044
I	On site	Tanks	1990	127124
I	On site	Tanks	1990	128325
I	On site	Unspecified Tank	1990	138217
I	On site	Tanks	1990	152990
I	On site	Tanks	1990	126568
I	On site	Tanks	1990	126628
I	On site	Unspecified Tank	1990	129824
I	On site	Tanks	1990	149459
I	On site	Tanks	1993	126628
I	On site	Tanks	1993	128325
I	On site	Unspecified Tank	1993	138217
I	On site	Unspecified Tank	1993	129824
I	On site	Tanks	1993	137900
I	On site	Tanks	1993	140730
I	On site	Tanks	1993	138402
I	On site	Tanks	1993	127784
I	On site	Tanks	1993	143772
I	On site	Tanks	1993	135703
I	On site	Tanks	1993	152990
I	On site	Tanks	1993	143772
I	On site	Tanks	1993	135703
I	On site	Tanks	1993	152990



ID	Location	Land Use	Date	Group ID
I	On site	Tanks	1993	126628
I	On site	Tanks	1993	128325
I	On site	Tanks	1993	137900
I	On site	Unspecified Tank	1993	129824
I	On site	Tanks	1993	140730
I	On site	Tanks	1993	138402
I	On site	Unspecified Tank	1993	138217
I	On site	Tanks	1993	127784
K	On site	Unspecified Tank	1959	118303
L	On site	Tanks	1993	147495
L	On site	Tanks	1993	141868
L	On site	Tanks	1980	142465
L	On site	Tanks	1993	147495
L	On site	Tanks	1993	141868
M	On site	Tanks	1980	150468
M	On site	Tanks	1980	153315
M	On site	Tanks	1980	134406
M	On site	Tanks	1993	134406
M	On site	Tanks	1993	150468
M	On site	Tanks	1993	153315
N	On site	Tanks	1993	126361
N	On site	Tanks	1993	154214
N	On site	Tanks	1993	137584
N	On site	Unspecified Tank	1993	133381
N	On site	Tanks	1993	142717
N	On site	Tanks	1993	140792
N	On site	Tanks	1993	154533
N	On site	Tanks	1993	141628



ID	Location	Land Use	Date	Group ID
N	On site	Tanks	1993	133619
N	On site	Tanks	1993	155821
N	On site	Tanks	1993	137498
N	On site	Tanks	1993	133413
N	On site	Tanks	1993	132455
N	On site	Tanks	1993	126795
N	On site	Unspecified Tank	1993	129610
N	On site	Unspecified Tank	1993	145329
N	On site	Tanks	1959	151369
N	On site	Unspecified Tank	1959	141346
N	On site	Unspecified Tank	1959	148517
N	On site	Unspecified Tank	1959	127245
N	On site	Unspecified Tank	1959	139400
N	On site	Unspecified Tank	1980	129610
N	On site	Tanks	1980	138814
N	On site	Tanks	1980	149360
N	On site	Tanks	1980	140660
N	On site	Tanks	1980	143433
N	On site	Tanks	1980	145112
N	On site	Unspecified Tank	1980	155150
N	On site	Tanks	1980	130245
N	On site	Tanks	1980	146761
N	On site	Tanks	1980	144025
N	On site	Tanks	1980	142452
N	On site	Unspecified Tank	1980	144947
N	On site	Tanks	1980	132044
N	On site	Tanks	1980	154214
N	On site	Tanks	1980	137584



ID	Location	Land Use	Date	Group ID
N	On site	Unspecified Tank	1959	153507
N	On site	Tanks	1959	128944
N	On site	Tanks	1959	151074
N	On site	Tanks	1959	131906
N	On site	Unspecified Tank	1959	114756
N	On site	Tanks	1970	129170
N	On site	Unspecified Tank	1970	149869
N	On site	Unspecified Tank	1970	144832
N	On site	Unspecified Tank	1970	145203
N	On site	Unspecified Tank	1970	130884
N	On site	Unspecified Tank	1970	138711
N	On site	Tanks	1965	153935
N	On site	Tanks	1965	144792
N	On site	Tanks	1965	154030
N	On site	Unspecified Tank	1965	153507
N	On site	Unspecified Tank	1990	138711
N	On site	Tanks	1990	142831
N	On site	Tanks	1990	155214
N	On site	Unspecified Tank	1993	138711
N	On site	Tanks	1993	142831
N	On site	Tanks	1993	149945
N	On site	Tanks	1993	149945
N	On site	Tanks	1993	142831
N	On site	Unspecified Tank	1993	138711
N	On site	Tanks	1993	154214
N	On site	Tanks	1993	126361
N	On site	Tanks	1993	142717
N	On site	Unspecified Tank	1993	129610



ID	Location	Land Use	Date	Group ID
N	On site	Unspecified Tank	1993	133381
N	On site	Tanks	1993	126795
N	On site	Unspecified Tank	1993	145329
N	On site	Unspecified Tank	1993	144947
N	On site	Tanks	1993	140792
N	On site	Tanks	1993	154533
N	On site	Tanks	1993	141628
N	On site	Tanks	1993	133413
N	On site	Tanks	1993	137498
N	On site	Tanks	1993	133619
N	On site	Tanks	1993	155821
N	On site	Tanks	1993	137584
N	On site	Tanks	1993	132455
O	On site	Tanks	1980	133329
O	On site	Tanks	1993	142209
O	On site	Tanks	1993	142209
P	On site	Unspecified Tank	1980	153320
P	On site	Unspecified Tank	1959	139397
P	On site	Unspecified Tank	1965	152787
P	On site	Unspecified Tank	1993	141455
P	On site	Unspecified Tank	1993	141455
Q	On site	Unspecified Tank	1980	146978
Q	On site	Unspecified Tank	1959	132750
Q	On site	Unspecified Tank	1965	141074
Q	On site	Unspecified Tank	1993	146978
Q	On site	Unspecified Tank	1993	146978
R	On site	Tanks	1980	150043
R	On site	Tanks	1959	146281



ID	Location	Land Use	Date	Group ID
R	On site	Tanks	1965	145167
R	On site	Unspecified Tank	1993	149447
R	On site	Unspecified Tank	1993	131981
R	On site	Unspecified Tank	1993	149447
R	On site	Unspecified Tank	1993	131981
S	On site	Tanks	1993	145770
S	On site	Tanks	1980	139992
S	On site	Tanks	1959	131725
S	On site	Tanks	1965	143080
S	On site	Tanks	1993	145770
T	On site	Tanks	1993	144014
T	On site	Tanks	1993	137352
T	On site	Tanks	1980	150840
T	On site	Tanks	1980	144014
T	On site	Tanks	1959	149386
T	On site	Tanks	1959	150840
T	On site	Tanks	1965	149386
T	On site	Tanks	1965	150840
T	On site	Tanks	1993	137352
T	On site	Tanks	1993	144014
U	On site	Tanks	1993	145150
U	On site	Tanks	1993	126376
U	On site	Tanks	1993	154676
U	On site	Tanks	1993	135067
U	On site	Tanks	1993	153077
U	On site	Tanks	1993	127756
U	On site	Tanks	1993	151779
U	On site	Tanks	1993	145600



ID	Location	Land Use	Date	Group ID
U	On site	Tanks	1993	130223
U	On site	Tanks	1993	138160
U	On site	Tanks	1993	139315
U	On site	Tanks	1993	127484
U	On site	Tanks	1993	153238
U	On site	Tanks	1980	145150
U	On site	Tanks	1980	126376
U	On site	Tanks	1980	128369
U	On site	Tanks	1980	139987
U	On site	Tanks	1980	153077
U	On site	Tanks	1980	140362
U	On site	Tanks	1980	151779
U	On site	Tanks	1980	127521
U	On site	Tanks	1980	143198
U	On site	Tanks	1980	153238
U	On site	Tanks	1980	148867
U	On site	Tanks	1980	133858
U	On site	Tanks	1980	154541
U	On site	Tanks	1959	143357
U	On site	Tanks	1959	148867
U	On site	Tanks	1959	133858
U	On site	Tanks	1959	131780
U	On site	Tanks	1959	140362
U	On site	Tanks	1959	139036
U	On site	Tanks	1959	147816
U	On site	Tanks	1959	154192
U	On site	Tanks	1959	145658
U	On site	Tanks	1959	147665



ID	Location	Land Use	Date	Group ID
U	On site	Tanks	1959	128088
U	On site	Tanks	1959	136612
U	On site	Tanks	1959	148650
U	On site	Unspecified Tank	1959	121754
U	On site	Tanks	1965	152281
U	On site	Tanks	1965	130705
U	On site	Tanks	1965	153816
U	On site	Tanks	1965	132108
U	On site	Tanks	1965	137959
U	On site	Tanks	1965	140362
U	On site	Tanks	1965	153756
U	On site	Tanks	1965	136398
U	On site	Tanks	1965	146350
U	On site	Tanks	1965	148968
U	On site	Tanks	1965	133858
U	On site	Tanks	1965	148867
U	On site	Tanks	1965	129919
U	On site	Tanks	1993	138160
U	On site	Tanks	1993	127756
U	On site	Tanks	1993	139315
U	On site	Tanks	1993	127484
U	On site	Tanks	1993	153238
U	On site	Tanks	1993	130223
U	On site	Tanks	1993	145600
U	On site	Tanks	1993	154676
U	On site	Tanks	1993	135067
U	On site	Tanks	1993	142359
U	On site	Tanks	1993	153077



ID	Location	Land Use	Date	Group ID
U	On site	Tanks	1993	126376
U	On site	Tanks	1993	145150
V	On site	Unspecified Tank	1959	129882
V	On site	Unspecified Tank	1965	129882
W	On site	Tanks	1993	126418
W	On site	Tanks	1986	149295
W	On site	Tanks	1959	136205
W	On site	Tanks	1961	136205
Z	On site	Unspecified Tank	1959	136632
Z	On site	Unspecified Tank	1965	136632
AA	On site	Unspecified Tank	1980	155518
AA	On site	Tanks	1980	127490
AA	On site	Unspecified Tank	1993	155518
AA	On site	Tanks	1993	151309
AA	On site	Tanks	1993	153569
AA	On site	Tanks	1993	149079
AB	On site	Unspecified Tank	1980	156066
AB	On site	Unspecified Tank	1959	142375
AB	On site	Unspecified Tank	1965	138715
BA	On site	Tanks	1993	139024
BA	On site	Tanks	1993	155735
BA	On site	Tanks	1993	130073
AC	On site	Unspecified Tank	1980	127963
AC	On site	Unspecified Tank	1959	141080
AC	On site	Unspecified Tank	1965	145657
BB	On site	Unspecified Tank	1993	153194
AC	On site	Unspecified Tank	1993	132448
BB	On site	Unspecified Tank	1993	153194



ID	Location	Land Use	Date	Group ID
AD	On site	Tanks	1986	109125
AD	On site	Unspecified Tank	1986	116383
AD	On site	Tanks	1986	109126
BC	On site	Unspecified Tank	1993	129064
BC	On site	Unspecified Tank	1993	129064
AE	On site	Tanks	1980	130659
AE	On site	Unspecified Tank	1993	145883
AE	On site	Tanks	1993	153423
AE	On site	Unspecified Tank	1993	145883
AE	On site	Tanks	1993	153423
AG	On site	Tanks	1993	152643
AG	On site	Tanks	1993	136710
AG	On site	Tanks	1993	132623
AG	On site	Tanks	1993	132145
AG	On site	Unspecified Tank	1993	146999
AG	On site	Tanks	1980	148361
AG	On site	Tanks	1980	132930
AG	On site	Unspecified Tank	1993	146999
AG	On site	Tanks	1993	136710
AG	On site	Tanks	1993	132623
AG	On site	Tanks	1993	152643
AG	On site	Tanks	1993	132145
AH	On site	Tanks	1993	129335
AH	On site	Tanks	1980	134349
AH	On site	Tanks	1993	129335
AI	On site	Tanks	1993	138351
AI	On site	Tanks	1993	153699
AI	On site	Unspecified Tank	1993	150544



ID	Location	Land Use	Date	Group ID
AI	On site	Unspecified Tank	1980	150544
AI	On site	Tanks	1980	142573
AI	On site	Tanks	1980	138148
AI	On site	Tanks	1993	153699
AI	On site	Tanks	1993	138351
AI	On site	Unspecified Tank	1993	150544
AJ	On site	Tanks	1993	130556
AJ	On site	Unspecified Tank	1980	121752
AJ	On site	Unspecified Tank	1980	121753
AJ	On site	Tanks	1993	130556
AK	On site	Tanks	1993	145577
AK	On site	Tanks	1986	142823
AL	On site	Tanks	1986	109124
AL	On site	Unspecified Tank	1986	116384
AQ	On site	Unspecified Tank	1993	137363
AQ	On site	Unspecified Tank	1976	141618
AQ	On site	Unspecified Tank	1959	150595
AQ	On site	Unspecified Tank	1958	147987
AQ	On site	Unspecified Tank	1958	132862
AQ	On site	Unspecified Tank	1963	127786
AQ	On site	Unspecified Tank	1959	136686
AQ	On site	Unspecified Tank	1959	132862
AQ	On site	Unspecified Tank	1983	129090
AQ	On site	Tanks	1983	151100
AQ	On site	Unspecified Tank	1994	137363
AQ	On site	Tanks	1994	151100
AQ	On site	Unspecified Tank	1993	137363
AT	On site	Unspecified Tank	1993	136591



ID	Location	Land Use	Date	Group ID
AT	On site	Unspecified Tank	1993	114685
AT	On site	Unspecified Tank	1993	116379
AT	On site	Unspecified Tank	1993	143918
AU	On site	Tanks	1993	142989
AU	On site	Tanks	1993	146581
AU	On site	Tanks	1993	129351
AU	On site	Unspecified Tank	1993	132618
AU	On site	Unspecified Tank	1993	127329
AU	On site	Unspecified Tank	1993	141431
AU	On site	Unspecified Tank	1993	121751
AU	On site	Tanks	1993	135650
AU	On site	Tanks	1993	137111
AU	On site	Unspecified Tank	1993	143775
AU	On site	Tanks	1993	153551
AU	On site	Tanks	1993	130510
AU	On site	Tanks	1993	126430
AU	On site	Tanks	1993	142862
AU	On site	Tanks	1980	155446
AU	On site	Unspecified Tank	1980	141431
AU	On site	Tanks	1980	140147
AU	On site	Tanks	1980	130510
AU	On site	Unspecified Tank	1980	143775
AU	On site	Unspecified Tank	1980	116382
AU	On site	Tanks	1980	137877
AU	On site	Tanks	1980	142862
AU	On site	Tanks	1980	153551
AU	On site	Tanks	1980	137111
AU	On site	Tanks	1980	155772



ID	Location	Land Use	Date	Group ID
AU	On site	Tanks	1980	133831
AU	On site	Tanks	1959	126998
AU	On site	Unspecified Tank	1959	143225
AU	On site	Tanks	1959	131518
AU	On site	Unspecified Tank	1959	116388
AU	On site	Tanks	1959	141388
AU	On site	Tanks	1965	147713
AU	On site	Tanks	1965	141388
AU	On site	Tanks	1965	141076
AU	On site	Unspecified Tank	1965	143225
AU	On site	Tanks	1993	155446
AU	On site	Tanks	1993	142989
AU	On site	Tanks	1993	146581
AU	On site	Unspecified Tank	1993	132618
AU	On site	Unspecified Tank	1993	127329
AU	On site	Tanks	1993	153551
AU	On site	Unspecified Tank	1993	116378
AU	On site	Tanks	1993	135650
AU	On site	Tanks	1993	137111
AU	On site	Tanks	1993	130510
AU	On site	Unspecified Tank	1993	143775
AU	On site	Tanks	1993	126430
AU	On site	Unspecified Tank	1993	141431
AV	On site	Unspecified Tank	1993	144752
AV	On site	Unspecified Tank	1993	144752
AW	On site	Tanks	1993	146155
AW	On site	Tanks	1980	146155
AW	On site	Tanks	1993	146155



ID	Location	Land Use	Date	Group ID
AX	On site	Tanks	1970	141579
AX	On site	Tanks	1970	109786
AX	On site	Unspecified Tank	1990	144709
AX	On site	Tanks	1990	141579
AX	On site	Tanks	1993	129578
AX	On site	Unspecified Tank	1993	147205
AX	On site	Unspecified Tank	1993	144709
AX	On site	Tanks	1993	141579
AX	On site	Unspecified Tank	1993	144709
AX	On site	Tanks	1993	141579
AX	On site	Tanks	1993	129578
AX	On site	Unspecified Tank	1993	147205
AY	On site	Tanks	1970	126767
AY	On site	Tanks	1970	133598
AY	On site	Unspecified Tank	1970	124213
AY	On site	Tanks	1990	136775
AY	On site	Tanks	1993	136775
AY	On site	Tanks	1993	136775
AZ	On site	Unspecified Tank	1990	141348
AZ	On site	Unspecified Tank	1990	140490
AZ	On site	Unspecified Tank	1993	141348
AZ	On site	Unspecified Tank	1993	140490
AZ	On site	Unspecified Tank	1993	141348
AZ	On site	Unspecified Tank	1993	140490
AQ	1m N	Unspecified Tank	1993	134185
AQ	1m N	Unspecified Tank	1993	134185
13	4m N	Tanks	1983	110984
BI	5m W	Unspecified Tank	1983	116395



ID	Location	Land Use	Date	Group ID
BI	6m W	Unspecified Tank	1983	116396
AQ	6m N	Tanks	1983	136256
AQ	6m N	Tanks	1958	135797
AQ	7m N	Tanks	1959	150987
AQ	7m N	Tanks	1994	136256
BK	7m E	Tanks	1993	155663
BK	7m E	Tanks	1993	155663
BK	8m E	Tanks	1976	152306
AQ	8m W	Tanks	1959	108487
AQ	8m W	Unspecified Tank	1959	138301
AQ	9m W	Unspecified Tank	1963	142910
AQ	9m N	Unspecified Tank	1993	155149
AQ	9m N	Unspecified Tank	1993	155149
AQ	9m W	Unspecified Tank	1963	138301
BM	9m W	Tanks	1961	145493
AQ	9m E	Unspecified Tank	1983	131027
BM	10m W	Tanks	1961	134504
BH	10m W	Tanks	1959	146770
AQ	10m E	Unspecified Tank	1994	131027
BH	10m W	Tanks	1961	146770
BM	10m W	Tanks	1986	128700
BM	10m W	Tanks	1959	148669
BM	11m W	Tanks	1986	136535
BM	11m W	Tanks	1959	141107
BJ	11m W	Tanks	1961	148229
BJ	12m W	Tanks	1986	140255
BJ	12m W	Tanks	1959	127175
BP	14m N	Unspecified Tank	1982	131558



ID	Location	Land Use	Date	Group ID
BO	14m W	Tanks	1961	110833
BO	14m W	Tanks	1961	110832
BN	14m W	Unspecified Tank	1965	126239
BN	14m W	Tanks	1961	108486
BN	14m W	Unspecified Tank	1993	148568
BN	14m W	Unspecified Tank	1986	126788
BN	14m W	Unspecified Tank	1959	137916
BP	14m N	Unspecified Tank	1993	131558
BN	15m W	Unspecified Tank	1993	151366
BN	15m W	Unspecified Tank	1993	151366
BN	15m W	Unspecified Tank	1980	133440
BN	15m W	Unspecified Tank	1959	147593
BQ	15m W	Tanks	1986	134731
BQ	16m W	Tanks	1993	134731
BO	16m W	Unspecified Tank	1986	148825
BO	16m W	Unspecified Tank	1959	127661
BO	16m W	Unspecified Tank	1986	142212
BO	16m W	Unspecified Tank	1959	144008
BR	16m W	Tanks	1986	136473
BR	16m W	Tanks	1993	136473
BS	16m W	Tanks	1993	144330
BS	16m W	Tanks	1986	153983
14	16m N	Tanks	1983	110983
BN	18m W	Unspecified Tank	1986	133440
BN	18m W	Unspecified Tank	1959	147593
AQ	19m SE	Unspecified Tank	1959	138429
BN	19m W	Unspecified Tank	1993	152475
BJ	20m W	Unspecified Tank	1986	127041



ID	Location	Land Use	Date	Group ID
BJ	20m W	Unspecified Tank	1959	135494
AQ	20m SE	Unspecified Tank	1958	147151
BE	20m N	Tanks	1983	129124
BE	20m N	Tanks	1959	153167
BE	20m N	Tanks	1993	129124
BE	20m N	Tanks	1993	129124
BE	20m N	Tanks	1960	131538
BE	20m N	Tanks	1983	153267
BE	20m N	Tanks	1959	139461
BE	21m N	Tanks	1960	139461
BE	21m N	Tanks	1993	136461
BE	21m N	Tanks	1993	136461
BT	22m N	Tanks	1959	145138
BE	22m N	Tanks	1983	141718
BE	22m N	Tanks	1959	153370
BT	22m N	Tanks	1983	148096
BT	22m N	Tanks	1983	126890
BT	22m N	Tanks	1960	145138
BE	22m N	Tanks	1993	141718
BE	22m N	Tanks	1993	141718
15	25m E	Tanks	1986	110837
AQ	26m SW	Unspecified Tank	1958	129801
AQ	26m SW	Unspecified Tank	1959	129801
AQ	30m N	Unspecified Tank	1963	132569
BX	30m S	Tanks	1961	134548
BW	30m NE	Tanks	1983	134647
BW	30m NE	Tanks	1959	135745
BW	31m NE	Tanks	1960	131247



ID	Location	Land Use	Date	Group ID
BX	33m S	Tanks	1986	134548
BX	33m S	Tanks	1959	134548
BE	33m N	Tanks	1983	135483
BE	33m N	Tanks	1959	130721
BX	34m S	Unspecified Tank	1993	145022
BE	34m N	Tanks	1993	135483
BE	34m N	Tanks	1993	135483
BE	36m N	Unspecified Tank	1983	125934
BI	37m W	Unspecified Tank	1983	116394
BO	38m W	Tanks	1961	132832
BO	38m W	Tanks	1986	148922
BO	38m W	Tanks	1959	131933
BU	41m NE	Unspecified Tank	1993	135437
BU	42m NE	Unspecified Tank	1968	137515
BU	42m NE	Unspecified Tank	1982	137515
CA	42m N	Tanks	1993	152413
BJ	42m NW	Unspecified Tank	1986	144383
BJ	42m NW	Unspecified Tank	1959	145711
BU	42m NE	Unspecified Tank	1993	155562
BU	42m NE	Unspecified Tank	1968	155562
BU	42m NE	Unspecified Tank	1982	155562
CA	43m N	Tanks	1983	152413
BX	44m S	Unspecified Tank	1994	145022
BX	44m S	Tanks	1983	134548
BX	45m S	Tanks	1959	131476
BT	46m N	Tanks	1993	126409
BT	46m N	Tanks	1993	126409
BT	47m N	Tanks	1983	132982



ID	Location	Land Use	Date	Group ID
BX	48m SW	Unspecified Tank	1993	114695
CB	49m N	Unspecified Tank	1993	154834
CB	49m N	Unspecified Tank	1987	154834
BJ	51m NW	Unspecified Tank	1985	144366
BX	51m SW	Tanks	1958	134548
BX	51m SW	Tanks	1994	130314
BJ	52m NW	Unspecified Tank	1959	132474
CA	53m N	Unspecified Tank	1983	155182
CA	53m N	Unspecified Tank	1993	155182
BW	55m N	Unspecified Tank	1983	149689
BW	55m N	Unspecified Tank	1959	136390
BJ	55m W	Unspecified Tank	1985	146184
BJ	55m W	Unspecified Tank	1959	153196
BO	57m W	Unspecified Tank	1986	146675
BO	57m W	Unspecified Tank	1959	133775
BO	57m W	Unspecified Tank	1986	139979
BO	57m W	Unspecified Tank	1959	148884
BE	58m N	Tanks	1983	142711
BE	58m N	Tanks	1959	127105
BE	58m N	Tanks	1993	146177
BE	58m N	Tanks	1993	146177
BW	59m N	Tanks	1983	140391
BW	59m N	Tanks	1959	153396
BO	60m W	Tanks	1961	110834
BO	61m W	Unspecified Tank	1986	153497
BO	61m W	Unspecified Tank	1959	146740
BO	64m W	Tanks	1961	126631
BO	65m W	Unspecified Tank	1959	121378



ID	Location	Land Use	Date	Group ID
BO	65m W	Unspecified Tank	1959	146740
BO	65m W	Tanks	1985	126631
BO	65m W	Unspecified Tank	1985	143044
BX	68m SW	Unspecified Tank	1993	114694
BJ	69m NW	Unspecified Tank	1985	127965
CD	69m N	Tanks	1993	151115
BJ	69m NW	Unspecified Tank	1959	144726
CD	70m N	Tanks	1983	151115
BO	70m W	Unspecified Tank	1959	148884
BO	71m W	Unspecified Tank	1985	148249
CE	71m S	Unspecified Tank	1994	131246
CE	71m S	Unspecified Tank	1983	131246
CG	77m N	Tanks	1993	151794
CG	79m N	Tanks	1986	151794
CH	82m N	Tanks	1983	156078
CH	82m N	Tanks	1959	144960
CH	82m N	Tanks	1960	141946
BO	83m W	Unspecified Tank	1959	145898
BX	83m S	Unspecified Tank	1994	121487
BX	84m S	Tanks	1983	132418
BO	84m W	Unspecified Tank	1985	144867
BX	84m S	Tanks	1959	154982
BX	84m S	Tanks	1958	131441
BU	87m NE	Unspecified Tank	1982	155944
CI	88m E	Tanks	1961	148864
BU	88m NE	Unspecified Tank	1993	155944
BM	88m W	Unspecified Tank	1959	146991
CI	88m E	Tanks	1986	148864



ID	Location	Land Use	Date	Group ID
CI	88m E	Tanks	1959	148864
BM	88m W	Unspecified Tank	1985	126744
BU	88m NE	Unspecified Tank	1982	139084
BX	88m S	Unspecified Tank	1994	121490
BU	89m NE	Unspecified Tank	1993	139084
CA	90m N	Unspecified Tank	1983	142963
BJ	92m W	Unspecified Tank	1985	149209
AN	92m N	Unspecified Tank	1993	118318
CA	92m N	Unspecified Tank	1993	142963
BJ	92m W	Unspecified Tank	1959	152219
BJ	93m W	Unspecified Tank	1985	149369
BJ	94m W	Unspecified Tank	1959	135652
BM	94m W	Unspecified Tank	1959	155393
BO	94m W	Unspecified Tank	1959	121377
BM	95m W	Unspecified Tank	1985	152881
BO	96m W	Unspecified Tank	1959	136353
BO	96m W	Unspecified Tank	1985	146384
BO	98m W	Unspecified Tank	1959	131500
BX	98m S	Unspecified Tank	1994	121491
BO	99m W	Unspecified Tank	1985	135461
BJ	100m W	Unspecified Tank	1985	136830
BJ	101m W	Unspecified Tank	1959	143979
CL	102m N	Unspecified Tank	1993	153193
CL	103m N	Unspecified Tank	1982	153193
BM	106m W	Unspecified Tank	1959	138313
BO	106m W	Unspecified Tank	1959	133715
BM	107m W	Unspecified Tank	1959	147490
BO	107m W	Unspecified Tank	1985	143038



ID	Location	Land Use	Date	Group ID
BM	107m W	Unspecified Tank	1985	150999
BM	107m W	Unspecified Tank	1985	147211
CK	110m SE	Unspecified Tank	1963	138490
CK	110m SE	Unspecified Tank	1959	138490
BX	112m SW	Unspecified Tank	1994	139280
BX	112m SW	Unspecified Tank	1958	155465
BX	113m SW	Unspecified Tank	1983	151161
BX	115m SW	Unspecified Tank	1994	121488
BX	116m SW	Tanks	1958	135630
BX	116m SW	Tanks	1983	131115
BX	116m SW	Tanks	1959	139716
CN	117m NW	Unspecified Tank	1986	128605
CN	117m NW	Unspecified Tank	1959	128618
CN	118m NW	Tanks	1961	110074
CN	118m N	Unspecified Tank	1993	131887
CN	118m NW	Unspecified Tank	1993	131887
CN	119m N	Unspecified Tank	1986	151861
CN	119m N	Unspecified Tank	1959	151861
CP	119m N	Unspecified Tank	1959	151608
CP	119m N	Unspecified Tank	1968	143902
CP	119m N	Unspecified Tank	1965	149339
CQ	124m N	Tanks	1983	145678
CQ	125m N	Tanks	1993	145678
BU	129m N	Unspecified Tank	1993	144568
CN	130m NW	Tanks	1961	110075
CN	130m NW	Unspecified Tank	1993	132578
BU	130m N	Unspecified Tank	1982	144568
CT	130m N	Tanks	1993	137958



ID	Location	Land Use	Date	Group ID
CT	130m N	Tanks	1993	137958
CN	130m NW	Unspecified Tank	1986	153667
CN	130m NW	Unspecified Tank	1959	140552
CT	131m N	Tanks	1983	137958
CT	131m N	Tanks	1959	134909
CO	132m W	Tanks	1994	109129
BX	133m S	Unspecified Tank	1983	136828
BX	133m S	Unspecified Tank	1994	136828
BX	133m S	Unspecified Tank	1958	136828
BU	133m NE	Unspecified Tank	1993	150385
BX	134m S	Unspecified Tank	1959	136828
CP	134m N	Unspecified Tank	1984	146616
BU	134m NE	Unspecified Tank	1982	150385
CH	134m N	Tanks	1983	139724
CH	134m N	Tanks	1959	135741
CX	135m N	Tanks	1983	136450
CX	135m N	Tanks	1959	136118
CX	135m N	Tanks	1960	138648
CU	135m S	Tanks	1994	132654
CU	135m S	Tanks	1983	132654
CV	135m SW	Unspecified Tank	1983	148109
CH	135m N	Tanks	1960	127256
CU	136m S	Tanks	1959	139236
CU	136m S	Tanks	1958	155363
CJ	136m NW	Unspecified Tank	1993	127763
CV	136m SW	Unspecified Tank	1974	148109
CX	136m N	Tanks	1993	143864
CJ	137m NW	Unspecified Tank	1974	127763



ID	Location	Land Use	Date	Group ID
CH	137m N	Tanks	1983	128704
CH	137m N	Unspecified Tank	1959	121750
CT	137m N	Tanks	1993	138039
CT	137m N	Tanks	1993	138039
CT	137m N	Tanks	1983	144953
CT	137m N	Tanks	1959	144953
CT	138m N	Tanks	1960	144953
CX	139m N	Unspecified Tank	1965	147794
CX	140m N	Unspecified Tank	1968	147794
CX	140m N	Unspecified Tank	1959	126250
CX	140m N	Unspecified Tank	1987	155454
CY	140m N	Tanks	1993	131225
CY	140m N	Tanks	1993	131225
CX	141m N	Unspecified Tank	1993	155454
CY	141m N	Tanks	1960	126856
CY	141m N	Tanks	1983	145110
CY	141m N	Tanks	1959	126856
CT	143m N	Tanks	1960	135950
CZ	148m N	Unspecified Tank	1993	153100
CZ	148m N	Unspecified Tank	1968	151501
CZ	148m N	Unspecified Tank	1987	151501
CN	153m N	Unspecified Tank	1993	135561
CN	153m N	Unspecified Tank	1986	144432
CN	153m N	Unspecified Tank	1959	134244
BX	153m S	Unspecified Tank	1994	121489
CJ	154m NW	Unspecified Tank	1993	116677
BX	156m S	Tanks	1983	153087
BX	156m S	Tanks	1959	137787



ID	Location	Land Use	Date	Group ID
BX	156m S	Tanks	1958	134850
BX	156m S	Unspecified Tank	1994	121493
CH	157m NE	Tanks	1959	132976
CX	158m N	Tanks	1965	149788
BX	159m S	Unspecified Tank	1994	121492
21	160m W	Unspecified Tank	1983	121494
CJ	163m NW	Unspecified Tank	1974	153230
CN	163m NW	Unspecified Tank	1993	134769
DB	164m S	Tanks	1986	152232
CJ	164m NW	Unspecified Tank	1993	144326
DB	164m S	Tanks	1993	152232
CN	164m NW	Unspecified Tank	1986	127419
CN	164m NW	Unspecified Tank	1959	130878
CH	166m N	Tanks	1983	148086
CH	166m N	Tanks	1993	148086
CX	166m N	Tanks	1959	138648
DA	167m W	Tanks	1974	109214
CX	169m N	Tanks	1968	149788
CX	169m N	Tanks	1987	126211
CX	169m N	Tanks	1993	153616
CN	180m NW	Unspecified Tank	1993	150534
CN	181m NW	Unspecified Tank	1986	143122
CN	181m NW	Unspecified Tank	1959	149239
DE	184m W	Unspecified Tank	1961	140765
CR	184m NE	Tanks	1965	109780
DE	185m W	Unspecified Tank	1961	142286
DE	185m W	Unspecified Tank	1959	128694
DE	185m W	Unspecified Tank	1959	134630



ID	Location	Land Use	Date	Group ID
DF	185m SW	Unspecified Tank	1959	127670
DE	185m W	Unspecified Tank	1985	145674
DE	185m W	Tanks	1993	110836
DF	185m SW	Tanks	1958	110877
DE	185m W	Unspecified Tank	1985	132590
DE	186m W	Tanks	1993	110835
DF	186m SW	Unspecified Tank	1994	155757
CH	187m N	Unspecified Tank	1959	145184
DF	187m SW	Unspecified Tank	1983	139839
CH	187m NE	Tanks	1993	151693
CH	187m NE	Tanks	1983	145297
AO	189m N	Tanks	1983	132735
AO	189m N	Tanks	1993	126586
AO	189m N	Tanks	1993	126586
CR	191m NE	Tanks	1965	109779
CX	195m N	Tanks	1959	149272
DK	197m N	Tanks	1965	150568
DL	197m W	Tanks	1985	149417
CX	197m N	Tanks	1983	153443
DL	197m W	Unspecified Tank	1959	121375
DL	197m W	Tanks	1961	129751
CX	197m N	Tanks	1993	153616
DH	198m W	Tanks	1961	145188
DI	198m W	Tanks	1961	142958
DH	198m W	Tanks	1985	145188
DL	198m W	Tanks	1993	149417
DH	199m W	Unspecified Tank	1959	119203
DH	199m W	Tanks	1993	134419



ID	Location	Land Use	Date	Group ID
DI	201m W	Tanks	1985	128317
DI	201m W	Unspecified Tank	1959	119201
DI	202m W	Tanks	1993	128317
DO	203m W	Unspecified Tank	1959	151615
DO	204m W	Tanks	1961	110830
DN	204m NW	Unspecified Tank	1983	155938
DN	204m NW	Unspecified Tank	1993	155938
DN	204m NW	Unspecified Tank	1993	155938
DO	204m W	Unspecified Tank	1959	143617
DM	204m SW	Unspecified Tank	1974	130430
DO	204m W	Unspecified Tank	1985	148403
DO	204m W	Unspecified Tank	1985	147596
DO	205m W	Unspecified Tank	1993	133490
DO	205m W	Unspecified Tank	1993	147261
BX	205m S	Tanks	1994	129173
BX	205m S	Tanks	1959	153301
CH	205m NE	Tanks	1993	129137
DM	205m SW	Unspecified Tank	1983	153718
BX	205m S	Tanks	1983	153301
BX	205m S	Tanks	1958	153339
DK	206m N	Tanks	1993	147383
DK	206m N	Unspecified Tank	1968	154958
DK	206m N	Unspecified Tank	1959	151704
CH	206m NE	Tanks	1983	129137
DK	206m N	Tanks	1987	147383
DQ	208m W	Tanks	1974	112022
DM	208m W	Unspecified Tank	1974	127908
DN	209m NW	Tanks	1960	151105



ID	Location	Land Use	Date	Group ID
DN	209m NW	Tanks	1983	132098
DN	209m NW	Tanks	1959	146912
DN	209m NW	Tanks	1993	132098
DN	209m NW	Tanks	1993	132098
CH	211m N	Unspecified Tank	1983	148842
CH	212m NE	Tanks	1959	151862
DF	213m SW	Unspecified Tank	1959	147911
DQ	214m W	Tanks	1974	148145
DF	214m SW	Unspecified Tank	1994	134921
DF	214m SW	Unspecified Tank	1983	130111
DQ	214m W	Tanks	1993	148145
DQ	214m W	Tanks	1974	145767
DQ	215m W	Tanks	1993	145767
DP	220m W	Unspecified Tank	1985	153851
DP	220m W	Unspecified Tank	1959	156030
DP	220m W	Tanks	1961	110077
DP	220m W	Unspecified Tank	1993	148492
DS	222m N	Tanks	1965	144395
DT	225m NW	Unspecified Tank	1982	140335
CH	225m NE	Unspecified Tank	1959	136868
CH	225m NE	Unspecified Tank	1993	150344
DT	226m NW	Unspecified Tank	1993	140335
DR	227m N	Tanks	1993	131880
DR	228m N	Tanks	1983	155278
DR	228m N	Tanks	1987	155278
DE	228m W	Unspecified Tank	1959	127653
DE	228m W	Unspecified Tank	1961	143470
DE	228m W	Unspecified Tank	1959	145118



ID	Location	Land Use	Date	Group ID
DE	229m W	Unspecified Tank	1985	147331
DE	229m W	Unspecified Tank	1961	144473
DS	229m N	Tanks	1959	153045
DE	229m W	Unspecified Tank	1985	136846
BX	230m S	Tanks	1994	152924
DS	230m N	Tanks	1993	136886
BX	230m S	Tanks	1958	129373
DJ	231m SW	Tanks	1974	140239
DS	231m N	Tanks	1968	131789
DJ	231m SW	Tanks	1983	140239
DS	231m N	Tanks	1987	146709
DU	231m N	Tanks	1993	135685
DU	231m N	Tanks	1993	135685
DU	232m N	Tanks	1983	130617
DV	234m N	Tanks	1987	129809
DU	234m N	Tanks	1993	150919
DV	234m N	Tanks	1993	129809
DU	235m N	Tanks	1983	155703
DU	235m N	Tanks	1987	155703
DO	235m W	Unspecified Tank	1959	148371
DO	235m W	Unspecified Tank	1959	150122
DO	235m W	Unspecified Tank	1985	137153
DO	235m W	Tanks	1961	110831
DO	235m W	Unspecified Tank	1993	137153
DO	236m W	Unspecified Tank	1985	131220
DO	236m W	Unspecified Tank	1993	129045
CH	236m NE	Tanks	1993	152691
CH	238m NE	Tanks	1983	152691



ID	Location	Land Use	Date	Group ID
DP	245m NW	Unspecified Tank	1985	127595
DP	246m NW	Unspecified Tank	1993	140492
DP	246m NW	Unspecified Tank	1986	127595
DP	246m NW	Unspecified Tank	1959	137217
DP	246m NW	Unspecified Tank	1993	155139
DP	246m NW	Unspecified Tank	1959	126264
DL	248m W	Unspecified Tank	1959	121376
DU	249m NW	Unspecified Tank	1993	114705
DH	249m W	Unspecified Tank	1959	119204
DZ	251m W	Unspecified Tank	1959	150356
DZ	251m W	Tanks	1958	110876
DZ	252m W	Unspecified Tank	1994	134827
DI	252m W	Unspecified Tank	1959	119202
DS	252m N	Tanks	1965	134138
DZ	252m W	Unspecified Tank	1983	143220
EA	257m NW	Unspecified Tank	1961	141984
EA	257m NW	Unspecified Tank	1993	141604
EA	259m NW	Unspecified Tank	1986	133616
EA	259m NW	Unspecified Tank	1959	130173
EB	259m SW	Unspecified Tank	1959	132508
DY	259m NW	Tanks	1993	143284
EB	259m SW	Unspecified Tank	1983	150280
CS	259m NW	Tanks	1993	109208
EB	259m SW	Unspecified Tank	1994	143854
DY	259m NW	Tanks	1974	143284
EB	260m SW	Unspecified Tank	1958	127454
DK	260m N	Tanks	1993	133306
DS	260m N	Tanks	1987	146584



ID	Location	Land Use	Date	Group ID
DK	260m N	Tanks	1987	133306
DK	261m N	Unspecified Tank	1968	127480
DK	261m N	Unspecified Tank	1959	140935
DS	262m N	Tanks	1959	134424
DS	263m N	Tanks	1993	127076
DS	263m N	Tanks	1968	151304
DS	264m N	Tanks	1987	144380
BX	265m W	Tanks	1994	151206
BX	265m W	Tanks	1958	130977
BX	265m W	Tanks	1959	150007
BX	265m W	Tanks	1983	130926
DP	267m W	Unspecified Tank	1985	127911
DP	268m W	Unspecified Tank	1959	137934
DP	269m W	Tanks	1961	110076
DP	269m W	Unspecified Tank	1993	130755
DO	270m W	Unspecified Tank	1959	133091
EC	270m S	Unspecified Tank	1961	138440
DO	270m W	Tanks	1961	110829
DO	270m W	Unspecified Tank	1985	147344
DO	270m W	Unspecified Tank	1959	141493
DU	270m NW	Tanks	1983	155185
DU	270m NW	Tanks	1987	155185
DO	270m W	Unspecified Tank	1993	137118
EE	270m N	Unspecified Tank	1993	149381
EC	271m S	Unspecified Tank	1986	138440
EC	271m S	Unspecified Tank	1959	138440
DO	271m W	Unspecified Tank	1985	141673
DO	271m W	Unspecified Tank	1993	133078



ID	Location	Land Use	Date	Group ID
DE	271m W	Unspecified Tank	1959	135628
EC	271m S	Unspecified Tank	1993	138440
DE	271m W	Unspecified Tank	1961	140937
DE	271m W	Unspecified Tank	1985	135628
DE	271m W	Unspecified Tank	1959	131107
DU	271m NW	Unspecified Tank	1993	138836
DE	271m W	Unspecified Tank	1985	140937
DE	271m W	Unspecified Tank	1961	135628
DU	271m NW	Tanks	1960	148490
DU	272m NW	Unspecified Tank	1959	144692
EE	272m N	Unspecified Tank	1983	149381
DZ	272m SW	Unspecified Tank	1959	128997
DZ	273m SW	Unspecified Tank	1994	133489
DZ	274m SW	Unspecified Tank	1983	154196
EG	278m W	Tanks	1974	109213
AP	283m N	Tanks	1959	127354
AP	283m N	Tanks	1960	127354
C	285m N	Tanks	1993	134188
C	286m N	Tanks	1959	152627
EK	286m N	Unspecified Tank	1993	154931
C	286m N	Tanks	1960	150970
C	287m N	Tanks	1983	129917
C	287m N	Tanks	1987	129917
EK	287m N	Unspecified Tank	1987	154931
AP	287m N	Unspecified Tank	1959	138815
AP	288m N	Unspecified Tank	1960	151490
AP	288m N	Unspecified Tank	1983	132226
AP	288m N	Unspecified Tank	1987	132226



ID	Location	Land Use	Date	Group ID
DS	288m N	Tanks	1987	134468
DP	289m W	Unspecified Tank	1985	127792
C	289m N	Tanks	1993	150532
EJ	289m S	Tanks	1986	109215
DP	289m W	Unspecified Tank	1993	142682
DP	289m W	Unspecified Tank	1993	146734
DP	289m W	Unspecified Tank	1959	127163
AP	290m N	Tanks	1993	136488
C	290m N	Tanks	1959	155606
DP	290m W	Unspecified Tank	1986	149585
DP	290m W	Unspecified Tank	1959	151461
C	292m N	Tanks	1983	141840
C	292m N	Tanks	1987	141840
AP	292m N	Unspecified Tank	1959	125904
EL	292m W	Unspecified Tank	1974	116679
AP	292m N	Tanks	1960	151466
AP	292m N	Unspecified Tank	1959	155768
DS	293m N	Tanks	1987	143467
AP	293m N	Unspecified Tank	1959	135287
AP	293m N	Tanks	1983	132400
AP	293m N	Tanks	1987	132400
AP	293m N	Unspecified Tank	1983	156104
AP	293m N	Unspecified Tank	1987	156104
AP	293m N	Unspecified Tank	1983	131126
AP	293m N	Unspecified Tank	1987	131126
AP	294m N	Unspecified Tank	1959	125902
DU	295m N	Unspecified Tank	1993	143193
AP	296m N	Tanks	1993	133455



ID	Location	Land Use	Date	Group ID
DU	297m N	Unspecified Tank	1983	147917
DU	297m N	Unspecified Tank	1987	147917
EL	298m W	Unspecified Tank	1974	133460
AP	298m N	Tanks	1959	138428
AP	299m N	Tanks	1983	134180
AP	299m N	Tanks	1987	134180
EL	299m W	Unspecified Tank	1983	149330
AM	301m N	Tanks	1965	151261
DU	303m NW	Unspecified Tank	1993	134649
DU	304m NW	Unspecified Tank	1959	134538
EO	306m N	Unspecified Tank	1993	150101
AP	307m N	Tanks	1993	152085
EO	307m N	Unspecified Tank	1982	150101
AM	307m N	Unspecified Tank	1993	152978
EI	308m S	Unspecified Tank	1986	135398
EI	308m S	Unspecified Tank	1959	130598
AP	308m N	Unspecified Tank	1959	125905
EI	308m S	Tanks	1961	110078
EI	309m S	Unspecified Tank	1993	135398
AM	309m N	Tanks	1968	149944
AM	309m N	Unspecified Tank	1959	146202
AM	309m N	Tanks	1987	149944
AP	309m N	Tanks	1983	132311
AP	309m N	Tanks	1987	132311
AP	309m N	Unspecified Tank	1959	125908
EQ	309m SW	Unspecified Tank	1959	149595
EQ	310m SW	Unspecified Tank	1958	128667
EK	310m N	Tanks	1993	154045



ID	Location	Land Use	Date	Group ID
EQ	310m SW	Unspecified Tank	1983	130487
EK	311m N	Tanks	1968	155948
EK	311m N	Tanks	1959	139269
EQ	311m SW	Unspecified Tank	1994	129936
EK	311m N	Tanks	1987	140707
EK	311m N	Tanks	1960	132394
ES	312m SW	Unspecified Tank	1983	133664
ES	312m SW	Unspecified Tank	1959	142352
ES	312m SW	Unspecified Tank	1958	147775
ES	313m SW	Unspecified Tank	1994	147164
AP	313m N	Unspecified Tank	1959	133849
EK	314m N	Tanks	1968	126280
EK	314m N	Tanks	1959	131654
AP	314m N	Unspecified Tank	1983	149291
AP	314m N	Unspecified Tank	1987	149291
AP	314m N	Tanks	1993	142066
AP	315m N	Unspecified Tank	1959	154921
AP	315m N	Unspecified Tank	1983	140224
AP	315m N	Unspecified Tank	1987	140224
AP	315m N	Unspecified Tank	1959	125903
AP	316m N	Tanks	1993	154123
EI	316m NW	Unspecified Tank	1993	134304
EI	316m NW	Tanks	1961	110073
EI	316m NW	Unspecified Tank	1986	139004
EI	316m NW	Unspecified Tank	1959	146128
AP	317m N	Unspecified Tank	1959	125909
AP	319m N	Tanks	1983	134776
AP	319m N	Tanks	1987	134776



ID	Location	Land Use	Date	Group ID
EK	320m N	Tanks	1968	156231
EK	320m N	Tanks	1959	149435
DS	321m N	Tanks	1987	144154
AP	321m N	Tanks	1993	127693
AP	323m N	Unspecified Tank	1959	125906
C	324m N	Unspecified Tank	1983	153371
C	324m N	Unspecified Tank	1987	153371
AP	324m N	Tanks	1983	149278
AP	324m N	Tanks	1987	149278
AP	325m N	Unspecified Tank	1959	125907
AP	325m N	Tanks	1993	127420
EI	326m S	Unspecified Tank	1986	132096
EI	326m S	Unspecified Tank	1959	144227
EI	326m S	Unspecified Tank	1993	140869
AP	327m N	Unspecified Tank	1959	125901
EK	327m N	Tanks	1987	150567
EK	328m N	Unspecified Tank	1987	121746
EK	333m N	Unspecified Tank	1993	129711
ET	334m N	Tanks	1993	150466
ET	334m N	Tanks	1987	150466
EK	335m N	Unspecified Tank	1987	129711
DU	335m N	Unspecified Tank	1993	150585
AP	336m N	Unspecified Tank	1959	151926
AP	337m N	Unspecified Tank	1959	150761
DU	337m N	Unspecified Tank	1959	133283
DU	337m N	Unspecified Tank	1960	133283
AP	337m N	Unspecified Tank	1983	149937
AP	337m N	Unspecified Tank	1987	149937



ID	Location	Land Use	Date	Group ID
DU	338m N	Unspecified Tank	1983	129732
DU	338m N	Unspecified Tank	1987	129732
AP	338m N	Unspecified Tank	1983	126545
AP	338m N	Unspecified Tank	1987	126545
AM	342m N	Tanks	1993	147647
AM	342m N	Tanks	1968	151195
AM	342m N	Unspecified Tank	1959	121730
AM	342m N	Tanks	1987	126717
EV	343m N	Unspecified Tank	1983	133264
EV	343m N	Unspecified Tank	1993	139078
EK	344m N	Unspecified Tank	1968	130112
EK	344m N	Unspecified Tank	1959	130112
EK	344m N	Unspecified Tank	1960	130112
EU	345m S	Tanks	1974	129966
EU	345m S	Tanks	1983	129966
EZ	346m SW	Unspecified Tank	1974	141225
EZ	346m SW	Unspecified Tank	1983	141225
AP	347m N	Tanks	1993	149801
EW	349m W	Unspecified Tank	1959	134988
EX	349m W	Tanks	1961	110072
EX	349m W	Unspecified Tank	1985	150853
EW	350m W	Unspecified Tank	1993	146600
EI	350m NW	Unspecified Tank	1993	129647
AP	350m N	Tanks	1983	149801
AP	350m N	Tanks	1987	149801
EX	350m W	Unspecified Tank	1959	131612
EW	350m W	Unspecified Tank	1985	138548
EW	350m W	Unspecified Tank	1959	137645



ID	Location	Land Use	Date	Group ID
C	350m N	Unspecified Tank	1959	134724
EW	350m W	Tanks	1961	110828
EY	351m W	Unspecified Tank	1961	148571
EY	351m W	Unspecified Tank	1961	153215
C	351m N	Unspecified Tank	1960	134724
EY	351m W	Unspecified Tank	1959	148571
EW	351m W	Unspecified Tank	1985	138729
EX	351m W	Unspecified Tank	1993	142490
EY	351m W	Unspecified Tank	1959	149088
EY	352m W	Unspecified Tank	1993	147661
FB	352m W	Unspecified Tank	1959	151193
EI	352m NW	Unspecified Tank	1986	126302
EI	352m NW	Unspecified Tank	1959	148402
EY	352m W	Unspecified Tank	1985	138931
EY	352m W	Unspecified Tank	1985	153215
EW	353m W	Unspecified Tank	1993	138729
FB	353m W	Unspecified Tank	1994	128942
FB	353m W	Unspecified Tank	1958	133484
EY	353m W	Unspecified Tank	1993	134291
EV	354m N	Unspecified Tank	1993	148859
EV	354m N	Unspecified Tank	1968	133264
FB	354m W	Unspecified Tank	1983	155736
EV	355m N	Unspecified Tank	1987	133264
EX	355m W	Unspecified Tank	1985	133403
FC	356m SW	Unspecified Tank	1959	135791
EX	356m W	Unspecified Tank	1959	144140
FC	356m SW	Unspecified Tank	1983	154416
EX	356m W	Unspecified Tank	1993	137656



ID	Location	Land Use	Date	Group ID
FA	356m NW	Tanks	1974	134249
FC	356m SW	Unspecified Tank	1958	127274
FC	357m SW	Unspecified Tank	1994	154189
C	357m N	Tanks	1993	146926
FA	357m NW	Tanks	1993	134249
DG	358m NW	Tanks	1974	109212
FD	358m N	Tanks	1993	130144
C	359m N	Tanks	1983	148969
C	359m N	Tanks	1987	148969
FD	359m N	Tanks	1987	130144
EK	365m N	Unspecified Tank	1968	133063
EK	365m N	Unspecified Tank	1959	133063
EK	365m N	Unspecified Tank	1960	133063
FF	368m SW	Unspecified Tank	1959	153523
FF	369m SW	Unspecified Tank	1994	140326
FF	369m SW	Unspecified Tank	1958	152437
AP	370m N	Tanks	1993	149783
FF	370m SW	Unspecified Tank	1983	140326
AP	370m N	Unspecified Tank	1993	134986
AP	370m N	Tanks	1959	141042
AP	370m N	Tanks	1960	141042
FE	371m SW	Tanks	1974	109211
AP	371m N	Unspecified Tank	1959	144716
FE	372m SW	Unspecified Tank	1983	116674
AP	372m N	Unspecified Tank	1959	125895
AP	372m N	Unspecified Tank	1983	150966
AP	372m N	Unspecified Tank	1987	150966
AP	372m N	Unspecified Tank	1959	125894



ID	Location	Land Use	Date	Group ID
AP	372m N	Tanks	1960	135536
AP	373m N	Tanks	1983	149783
AP	373m N	Tanks	1987	149783
FG	374m SW	Unspecified Tank	1983	116671
AP	375m N	Unspecified Tank	1959	133344
AP	376m N	Unspecified Tank	1983	151606
AP	376m N	Unspecified Tank	1987	151606
AP	376m N	Unspecified Tank	1959	125896
FH	378m N	Unspecified Tank	1968	155041
FH	378m N	Unspecified Tank	1982	155041
FH	378m N	Unspecified Tank	1987	134979
FH	379m N	Unspecified Tank	1968	148549
FH	379m N	Unspecified Tank	1993	142432
FH	379m N	Unspecified Tank	1993	153378
FJ	380m W	Tanks	1961	132663
FJ	380m W	Unspecified Tank	1959	143659
FJ	380m W	Unspecified Tank	1985	126221
FJ	381m W	Unspecified Tank	1993	131597
AP	381m N	Unspecified Tank	1959	125899
AP	382m N	Unspecified Tank	1959	125900
AP	383m N	Tanks	1959	143632
ET	383m N	Unspecified Tank	1993	143764
ET	384m N	Unspecified Tank	1978	140402
FE	385m SW	Unspecified Tank	1983	116675
FK	386m N	Unspecified Tank	1959	130716
FK	386m N	Unspecified Tank	1960	130716
ET	387m N	Unspecified Tank	1993	143593
AP	388m N	Tanks	1959	145275



ID	Location	Land Use	Date	Group ID
ET	388m N	Unspecified Tank	1978	143593
AP	389m N	Unspecified Tank	1959	125910
27	389m W	Unspecified Tank	1974	116678
AP	392m N	Tanks	1959	128125
FL	392m N	Unspecified Tank	1978	141509
FL	393m N	Unspecified Tank	1993	141499
FL	393m N	Unspecified Tank	1987	143397
FL	393m N	Unspecified Tank	1993	141499
FJ	394m W	Unspecified Tank	1993	126234
AP	394m N	Unspecified Tank	1959	125897
FJ	394m W	Tanks	1986	150216
FJ	394m W	Tanks	1959	145056
AP	395m N	Tanks	1959	144453
FI	396m NW	Unspecified Tank	1974	125107
EX	397m W	Tanks	1985	128361
AS	397m SW	Unspecified Tank	1959	142986
EX	398m W	Tanks	1993	128361
AS	398m SW	Unspecified Tank	1958	155515
AS	399m SW	Unspecified Tank	1994	140593
AS	399m SW	Unspecified Tank	1983	149820
FJ	399m S	Unspecified Tank	1993	119199
FI	403m NW	Unspecified Tank	1960	141506
FI	403m NW	Unspecified Tank	1958	144819
FI	403m NW	Unspecified Tank	1974	127299
FJ	403m W	Unspecified Tank	1993	119200
AP	404m N	Tanks	1959	147534
FM	407m N	Unspecified Tank	1993	134181
FM	408m N	Unspecified Tank	1987	134181



ID	Location	Land Use	Date	Group ID
FN	409m N	Unspecified Tank	1993	146251
FN	410m N	Unspecified Tank	1978	146251
FO	410m N	Tanks	1983	137694
FO	410m N	Tanks	1987	137694
FO	411m N	Tanks	1959	128819
FO	411m N	Tanks	1960	128961
FL	411m N	Unspecified Tank	1987	145201
FL	411m N	Unspecified Tank	1993	145201
AP	411m N	Unspecified Tank	1993	129713
FG	412m SW	Unspecified Tank	1974	143279
FG	412m SW	Unspecified Tank	1958	143279
FG	412m SW	Unspecified Tank	1959	143279
FG	412m SW	Unspecified Tank	1961	143279
AP	412m N	Tanks	1959	131372
FM	413m N	Unspecified Tank	1968	121747
EW	413m W	Unspecified Tank	1959	150621
FG	413m SW	Unspecified Tank	1983	143279
FG	413m SW	Tanks	1974	147634
AP	413m N	Unspecified Tank	1983	152080
AP	413m N	Unspecified Tank	1987	152080
FI	413m NW	Unspecified Tank	1960	155204
AP	414m N	Unspecified Tank	1983	125892
FG	414m SW	Tanks	1983	152683
EW	414m W	Unspecified Tank	1959	146835
FI	414m NW	Unspecified Tank	1958	144170
FI	414m NW	Unspecified Tank	1974	150977
EW	414m W	Unspecified Tank	1985	151194
AP	415m N	Unspecified Tank	1993	132449



ID	Location	Land Use	Date	Group ID
EW	415m W	Unspecified Tank	1993	138705
EW	415m W	Unspecified Tank	1993	155430
FE	415m SW	Tanks	1974	141758
FE	415m SW	Tanks	1983	141758
AP	415m N	Unspecified Tank	1959	151120
AP	415m N	Unspecified Tank	1960	129280
EY	415m W	Unspecified Tank	1959	150328
EY	415m W	Unspecified Tank	1959	133029
EW	415m W	Unspecified Tank	1985	146903
EY	415m W	Unspecified Tank	1961	130209
AP	415m N	Unspecified Tank	1983	138023
AP	415m N	Unspecified Tank	1987	148079
EY	415m W	Unspecified Tank	1961	138267
EY	416m W	Unspecified Tank	1993	139614
EY	416m W	Unspecified Tank	1985	130209
EY	416m W	Unspecified Tank	1985	138267
AP	416m N	Tanks	1960	132762
FO	416m N	Tanks	1959	131099
FQ	416m W	Unspecified Tank	1994	151109
FQ	416m W	Unspecified Tank	1959	131758
FQ	416m W	Unspecified Tank	1958	130070
AP	417m N	Unspecified Tank	1983	152461
AP	417m N	Unspecified Tank	1987	152461
FO	417m N	Tanks	1983	134467
FO	417m N	Tanks	1987	134467
EY	417m W	Unspecified Tank	1993	131189
FQ	418m W	Unspecified Tank	1983	139622
AP	419m N	Unspecified Tank	1959	125898



ID	Location	Land Use	Date	Group ID
FI	422m NW	Unspecified Tank	1993	151780
AP	422m N	Tanks	1960	141894
AP	422m N	Tanks	1959	141894
FI	422m NW	Unspecified Tank	1959	152944
FI	422m NW	Unspecified Tank	1974	151780
AP	423m N	Tanks	1983	141894
AP	423m N	Tanks	1987	141894
FR	424m N	Unspecified Tank	1968	121748
FT	425m N	Unspecified Tank	1993	136708
FT	426m N	Unspecified Tank	1968	136708
FV	426m N	Unspecified Tank	1993	150283
FU	427m NW	Unspecified Tank	1993	136551
FU	427m NW	Unspecified Tank	1974	136551
AP	429m N	Unspecified Tank	1959	125893
FO	429m N	Tanks	1959	127375
AP	430m N	Unspecified Tank	1993	141582
FO	430m N	Tanks	1960	145307
D	430m SW	Unspecified Tank	1959	128728
FV	430m N	Unspecified Tank	1987	150283
FG	430m SW	Unspecified Tank	1959	150928
FG	430m SW	Unspecified Tank	1961	150928
FG	431m SW	Unspecified Tank	1974	150928
FG	431m SW	Unspecified Tank	1958	150928
FO	431m N	Tanks	1983	129388
FO	431m N	Tanks	1987	129388
D	431m SW	Unspecified Tank	1994	143871
D	431m SW	Unspecified Tank	1958	146464
FX	431m W	Tanks	1974	109219



ID	Location	Land Use	Date	Group ID
FS	431m W	Unspecified Tank	1958	152272
FS	431m W	Unspecified Tank	1974	138591
FG	431m SW	Unspecified Tank	1983	153382
D	432m SW	Unspecified Tank	1983	146301
FS	432m W	Tanks	1960	109216
AP	432m N	Unspecified Tank	1983	141058
AP	432m N	Unspecified Tank	1987	141058
AP	433m N	Tanks	1959	133417
FY	434m SW	Unspecified Tank	1959	144968
FY	435m SW	Unspecified Tank	1958	150422
FY	435m SW	Unspecified Tank	1994	139445
FO	435m N	Tanks	1959	147645
FS	435m W	Tanks	1974	109220
FY	436m SW	Unspecified Tank	1983	141114
FG	437m SW	Unspecified Tank	1959	147032
FG	437m SW	Unspecified Tank	1961	147032
FG	438m SW	Unspecified Tank	1983	143128
FG	439m SW	Unspecified Tank	1974	135308
FG	439m SW	Unspecified Tank	1958	150552
FH	439m N	Unspecified Tank	1993	128955
FH	439m N	Unspecified Tank	1993	155435
FH	440m N	Unspecified Tank	1968	140969
FH	440m N	Unspecified Tank	1978	140969
FH	440m N	Unspecified Tank	1968	140969
FH	440m N	Unspecified Tank	1987	132847
AP	441m N	Tanks	1960	152588
AP	442m N	Tanks	1959	148581
AP	442m N	Tanks	1983	152588



ID	Location	Land Use	Date	Group ID
AP	442m N	Tanks	1987	152588
AP	444m N	Tanks	1960	154270
AP	444m N	Tanks	1959	137257
FI	444m NW	Tanks	1993	138269
FI	444m NW	Tanks	1974	138269
FP	444m N	Unspecified Tank	1993	138545
AP	444m N	Tanks	1983	139643
AP	444m N	Tanks	1987	139643
FP	445m N	Unspecified Tank	1978	138545
FU	445m NW	Tanks	1959	154619
FU	446m NW	Tanks	1960	133441
FG	446m SW	Tanks	1974	152476
FG	446m SW	Tanks	1958	152476
FG	446m SW	Tanks	1959	152476
FG	446m SW	Tanks	1961	152476
AP	446m N	Unspecified Tank	1983	133159
AP	446m N	Unspecified Tank	1987	133159
FO	448m N	Unspecified Tank	1993	142727
FO	449m N	Unspecified Tank	1983	154876
FO	449m N	Unspecified Tank	1987	154876
AP	449m N	Tanks	1993	129175
FO	449m N	Tanks	1959	154787
FO	450m N	Unspecified Tank	1983	142727
FO	450m N	Unspecified Tank	1987	142727
FG	451m SW	Unspecified Tank	1974	135120
FG	451m SW	Unspecified Tank	1983	135120
FU	452m NW	Unspecified Tank	1974	149654
FU	452m NW	Unspecified Tank	1993	149654



ID	Location	Land Use	Date	Group ID
FR	452m N	Tanks	1993	140918
AP	452m N	Tanks	1983	129114
AP	452m N	Tanks	1987	129114
FI	453m W	Unspecified Tank	1960	126937
FI	453m W	Unspecified Tank	1958	146911
FI	453m W	Unspecified Tank	1974	131487
FR	453m N	Tanks	1987	149701
FR	453m N	Tanks	1968	130954
AP	455m N	Tanks	1959	128271
D	457m SW	Unspecified Tank	1959	138682
FV	457m N	Tanks	1993	148171
D	458m SW	Unspecified Tank	1958	155074
FV	458m N	Tanks	1968	146333
FV	458m N	Tanks	1987	146333
D	459m SW	Unspecified Tank	1994	140304
D	459m SW	Unspecified Tank	1983	146897
GD	461m S	Unspecified Tank	1958	142840
GD	461m S	Unspecified Tank	1959	142840
GD	462m S	Unspecified Tank	1994	142840
AP	463m N	Unspecified Tank	1959	151528
AP	463m N	Unspecified Tank	1983	150447
AP	463m N	Unspecified Tank	1987	150447
FS	464m W	Tanks	1974	109222
GE	465m N	Unspecified Tank	1993	134060
GE	466m N	Unspecified Tank	1978	142157
FG	469m SW	Tanks	1974	136179
FG	469m SW	Tanks	1958	136179
FG	469m SW	Tanks	1959	136179



ID	Location	Land Use	Date	Group ID
FG	469m SW	Tanks	1961	136179
FG	470m SW	Tanks	1983	134202
FO	470m N	Tanks	1960	112297
FO	470m N	Tank (Fuel)	1959	112845
FS	472m W	Unspecified Tank	1958	127616
FS	472m W	Unspecified Tank	1974	136504
FI	473m NW	Unspecified Tank	1993	153249
GF	474m N	Unspecified Tank	1993	150847
FG	474m SW	Unspecified Tank	1983	116670
FI	474m NW	Unspecified Tank	1974	153249
GF	475m N	Unspecified Tank	1993	139824
FO	475m N	Unspecified Tank	1959	125933
GF	475m N	Unspecified Tank	1987	138055
FU	475m NW	Tanks	1959	155191
GF	475m N	Unspecified Tank	1978	146101
FI	475m NW	Unspecified Tank	1958	137289
FG	476m SW	Unspecified Tank	1983	116672
FU	476m NW	Unspecified Tank	1959	125106
FU	476m NW	Tanks	1974	148752
FU	476m NW	Unspecified Tank	1993	125108
FI	477m NW	Tanks	1993	135780
FU	477m NW	Tanks	1974	141778
FI	478m NW	Tanks	1974	138805
AP	479m N	Tanks	1960	148618
FG	480m SW	Tanks	1983	109210
AP	480m N	Tanks	1959	148618
FU	480m NW	Tanks	1959	151915
AP	483m N	Tanks	1959	136916



ID	Location	Land Use	Date	Group ID
AP	483m N	Tanks	1960	129476
FG	484m SW	Tanks	1974	144449
FG	484m SW	Tanks	1958	144449
FG	484m SW	Tanks	1959	144449
FG	484m SW	Tanks	1961	144449
AP	484m N	Tanks	1983	129476
FG	484m SW	Unspecified Tank	1974	133597
FG	484m SW	Tanks	1983	144449
FG	485m SW	Unspecified Tank	1983	133597
FU	485m NW	Tanks	1974	142632
FV	486m N	Tanks	1993	148477
FV	486m N	Tanks	1968	142251
FV	487m N	Tanks	1987	140420
FG	487m SW	Tanks	1974	143018
FG	487m SW	Tanks	1983	143018
FG	491m SW	Unspecified Tank	1974	132771
GG	491m SW	Unspecified Tank	1959	147359
GG	491m SW	Unspecified Tank	1994	135193
GG	491m SW	Unspecified Tank	1958	154144
FG	492m SW	Unspecified Tank	1983	132771
GG	492m SW	Unspecified Tank	1983	134751
GH	493m W	Unspecified Tank	1959	132150
GH	493m W	Unspecified Tank	1961	132150
FR	496m N	Tanks	1993	153082
GI	496m W	Tanks	1985	137313
GI	497m W	Tanks	1993	137313
GJ	499m SW	Tanks	1993	127421
GJ	499m SW	Tanks	1959	144128



ID	Location	Land Use	Date	Group ID
GJ	499m SW	Tanks	1961	144128
GJ	499m SW	Tanks	1974	128763
GJ	499m SW	Tanks	1958	131228
GJ	500m SW	Tanks	1983	148699
GJ	500m SW	Tanks	1987	148699
FS	500m W	Tanks	1974	109221

This data is sourced from Ordnance Survey® / Groundsure.

2.3 Historical energy features

Records within 500m

64

Energy features digitised from historical Ordnance Survey® mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 74 >](#)

ID	Location	Land Use	Date	Group ID
Z	On site	Electricity Substation	1980	77377
Z	On site	Electricity Substation	1993	87110
Z	On site	Electricity Substation	1993	87110
BD	On site	Electricity Substation	1993	90523
BD	On site	Electricity Substation	1993	89749
BD	On site	Electricity Substation	1976	71239
BD	On site	Electricity Substation	1993	90523
BE	On site	Electricity Substation	1993	84414
BE	On site	Electricity Substation	1983	79347
BE	On site	Electricity Substation	1993	84414
BF	On site	Electricity Substation	1982	83150
BF	On site	Electricity Substation	1993	83150
BG	On site	Electricity Substation	1987	83538
BG	On site	Electricity Substation	1993	83538



ID	Location	Land Use	Date	Group ID
AR	On site	Electricity Substation	1993	84302
AR	On site	Electricity Substation	1993	84302
AQ	2m N	Electricity Substation	1976	85356
AQ	3m N	Electricity Substation	1983	78100
AQ	4m N	Electricity Substation	1994	81671
AQ	6m N	Electricity Substation	1993	81671
AQ	6m N	Electricity Substation	1993	81671
BY	36m N	Electricity Substation	1993	64981
BY	39m N	Electricity Substation	1987	64509
BY	53m N	Electricity Substation	1993	69397
BY	53m N	Electricity Substation	1987	69397
CA	60m N	Electricity Substation	1993	79337
CA	60m N	Electricity Substation	1983	79337
CS	130m NW	Industrial Gases Factory	1974	68332
CW	134m N	Electricity Substation	1993	70296
CW	134m N	Electricity Substation	1983	70296
DR	216m N	Electricity Substation	1993	69838
DR	216m N	Electricity Substation	1993	69838
DR	217m N	Electricity Substation	1983	69838
DX	244m E	Electricity Substation	1978	82338
DX	245m E	Electricity Substation	1992	72538
ED	269m E	Electricity Substation	1978	85303
ED	269m E	Electricity Substation	1992	76862
EH	281m N	Electricity Substation	1993	86806
EH	281m N	Electricity Substation	1983	86806
EM	286m E	Electricity Generator Station	1984	92196
EM	286m E	Electricity Generator Station	1987	92196
25	287m SW	Electricity Substation	1983	64970



ID	Location	Land Use	Date	Group ID
EK	289m N	Electricity Substation	1993	79873
EK	289m N	Electricity Substation	1987	79873
CS	306m NW	Electricity Substation	1993	86271
EP	306m N	Electricity Substation	1993	86753
CS	307m NW	Electricity Substation	1974	86271
EP	307m N	Electricity Substation	1983	86753
ER	309m E	Electricity Substation	1978	79082
ER	309m E	Electricity Substation	1992	80545
FI	380m NW	Electricity Substation	1974	64969
FI	389m NW	Electricity Substation	1993	64963
28	391m E	Gas Governor	1992	68026
FM	393m N	Electricity Substation	1993	92184
FM	394m N	Electricity Substation	1987	92184
FP	415m N	Electricity Substation	1993	72940
FP	415m N	Electricity Substation	1978	72940
FW	433m E	Electricity Generating Station	1984	70932
FW	433m E	Electricity Generating Station	1991	77168
FW	433m E	Electric Generating Station	1992	68249
30	434m S	Electricity Substation	1986	66319
32	492m NE	Electricity Substation	1978	83205
GK	499m E	Electricity Substation	1978	91056
GK	499m E	Electricity Substation	1992	78235

This data is sourced from Ordnance Survey® / Groundsure.

2.4 Historical petrol stations

Records within 500m

1

Petrol stations digitised from historical Ordnance Survey® mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.



Features are displayed on the Past land use - un-grouped map on [page 74 >](#)

ID	Location	Land Use	Date	Group ID
FO	470m N	Tank (Fuel)	1959	1599

This data is sourced from Ordnance Survey® / Groundsure.

2.5 Historical garages

Records within 500m

3

Garages digitised from historical Ordnance Survey® mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 74 >](#)

ID	Location	Land Use	Date	Group ID
DW	238m SE	Garage	1963	25249
DW	238m SE	Garage	1982	25249
DW	246m SE	Garage	1993	26197

This data is sourced from Ordnance Survey® / Groundsure.



3 Waste and landfill



- Site Outline
- Search buffers in metres (m)
- Historical landfill (EA/NRW)
- Historical waste sites
- Licensed waste sites
- Waste exemptions

3.1 Active or recent landfill

Records within 500m

0

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.2 Historical landfill (BGS records)

Records within 500m

0

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

This data is sourced from the British Geological Survey.



3.3 Historical landfill (LA/mapping records)

Records within 500m

0

Landfill sites identified from Local Authority records and high detail historical mapping.

This data is sourced from the Ordnance Survey®/Groundsure and Local Authority records.

3.4 Historical landfill (EA/NRW records)

Records within 500m

3

Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

Features are displayed on the Waste and landfill map on [page 153 >](#)

ID	Location	Details		
3	129m S	Site Address: Burmah Refinery, Ellesmere Port, Cheshire Licence Holder Address: -	Waste Licence: - Site Reference: 60347 Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: - Licence Holder: Burmah Castrol Company, Burmah Refinery, Ellesmere First Recorded: - Last Recorded: -
4	185m N	Site Address: Ince Power Station, Ince, Elton, Cheshire Licence Holder Address: -	Waste Licence: - Site Reference: - Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: - Licence Holder: - First Recorded: - Last Recorded: -
6	303m NE	Site Address: Burmah Refinery, Ellesmere Port, Cheshire Licence Holder Address: -	Waste Licence: - Site Reference: - Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: - Licence Holder: - First Recorded: - Last Recorded: -

This data is sourced from the Environment Agency and Natural Resources Wales.



3.5 Historical waste sites

Records within 500m

3

Waste site records derived from Local Authority planning records and high detail historical mapping.

Features are displayed on the Waste and landfill map on [page 153 >](#)

ID	Location	Address	Further Details	Date
1	On site	Site Address: N/A	Type of Site: Ground Workings and Refuse Heap Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1978
A	On site	Site Address: Shell Technology Centre Thornt, Pool Lane, Ince, Chester, Cheshire, CH2 4NU	Type of Site: Waste Transfer Station Planning application reference: 13/00244/WAS Description: Scheme comprises excavation, removal and infilling of contaminated ground and infilling of open pits and chambers following demolitions at the redundant LNG area within Shell Technology Centre Thornton. The use of imported of granular fill material necessary to complete the infilling. Data source: Historic Planning Application Data Type: Point	26/02/2013
8	480m N	Site Address: Land At Plot 8 Protos, Grinsome Road, Ince, Chester, Cheshire, CH2	Type of Site: Energy From Waste Facility Planning application reference: 16/03074/FUL Description: Scheme comprises construction of an Energy from Waste Facility (up to 35MW) and associated development including access and landscaping with SUDS. The associated works include sewer systems, landscaping, infrastructure, enabling and access roads. Data source: Historic Planning Application Data Type: Point	07/09/2017

This data is sourced from Ordnance Survey®/Groundsure and Local Authority records.

3.6 Licensed waste sites

Records within 500m

2

Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

Features are displayed on the Waste and landfill map on [page 153 >](#)



ID	Location	Details		
I	421m NW	Site Name: Castrol Stanlow Works Site Address: Corridor Road, Ellesmere Port, Cheshire, CH65 4CW Correspondence Address: Breakspear Park, Breakspear Way, Hemel Hempstead, Hertfordshire, HP2 4UL	Type of Site: Physico-Chemical Treatment Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: EOL001 EPR reference: - Operator: Electricval Oil Services Ltd Waste Management licence No: 53566 Annual Tonnage: 24999	Issue Date: 10/02/1997 Effective Date: 24/10/2002 Modified: 26/09/2002 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred
I	421m NW	Site Name: Electrical Oil Services Site Address: Stanlow Works, Bridge Road, Ellesmere Port, Cheshire, CH65 4WD Correspondence Address: -	Type of Site: Physico-Chemical Treatment Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 654410 EPR reference: EA/EPR/VP3492CB Operator: Electrical Oil Services Limited Waste Management licence No: 53566 Annual Tonnage: 24999	Issue Date: 10/02/1997 Effective Date: 10/02/1997 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Superseded

This data is sourced from the Environment Agency and Natural Resources Wales.

3.7 Waste exemptions

Records within 500m	124
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Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on [page 153 >](#)

ID	Location	Site	Reference	Category	Sub-Category	Description
2	On site	Protos, Grinsome Road, Chester, Ch2 4rb	WEX426862	Using waste exemption	Not on a farm	Use of waste in construction
A	On site	Elton Lane Farm, Elton Lane, Elton, Chester, Ch2 4nu	WEX172361	Using waste exemption	On a farm	Use of waste for a specified purpose
A	On site	Elton Lane Farm, Elton Lane, Elton, Chester, Ch2 4nu	WEX172361	Storing waste exemption	On a farm	Storage of waste in a secure place



ID	Location	Site	Reference	Category	Sub-Category	Description
A	On site	Elton Lane Farm, Elton Lane, Elton, Chester, Ch2 4nu	WEX172361	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
A	On site	Elton Lane Farm, Elton Lane, Elton, Chester, Ch2 4nu	WEX172361	Treating waste exemption	On a farm	Screening and blending of waste
B	On site	Elton Lane Farm, Elton Lane, Elton, Chester, Ch2 4nu	WEX013584	Treating waste exemption	On a farm	Screening and blending of waste
B	On site	Elton Lane Farm, Elton Lane, Elton, Chester, Ch2 4nu	WEX013584	Storing waste exemption	On a farm	Storage of waste in a secure place
B	On site	Elton Lane Farm, Elton Lane, Elton, Chester, Ch2 4nu	WEX013584	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
B	On site	Elton Lane Farm, Elton Lane, Elton, Chester, Ch2 4nu	WEX013584	Using waste exemption	On a farm	Use of waste for a specified purpose
B	On site	University Of Chester, Pool Lane, Ince, Chester, Ch2 4nu	WEX083309	Using waste exemption	Not on a farm	Use of waste for a specified purpose
B	On site	Elton Lane Farm, Elton Lane, Elton, Chester, Ch2 4nu	WEX305575	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
B	On site	Elton Lane Farm, Elton Lane, Elton, Chester, Ch2 4nu	WEX305575	Using waste exemption	On a farm	Use of waste for a specified purpose
B	On site	Elton Lane Farm, Elton Lane, Elton, Chester, Ch2 4nu	WEX305575	Storing waste exemption	On a farm	Storage of waste in a secure place
B	On site	Elton Lane Farm, Elton Lane, Elton, Chester, Ch2 4nu	WEX305575	Using waste exemption	On a farm	Use of waste in construction
B	On site	Elton Lane Farm, Elton Lane, Elton, Chester, Ch2 4nu	WEX305575	Treating waste exemption	On a farm	Screening and blending of waste
B	On site	Elton Lane Farm, Elton Lane, Elton, Chester, Ch2 4nu	WEX305575	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit



ID	Location	Site	Reference	Category	Sub-Category	Description
B	On site	University Of Chester, Pool Lane, Ince, Chester, Ch2 4nu	WEX228725	Using waste exemption	Not on a farm	Use of waste for a specified purpose
B	On site	Elton Lane Farm, Elton Lane, Elton, Chester, Ch2 4nu	WEX438013	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
B	On site	Elton Lane Farm, Elton Lane, Elton, Chester, Ch2 4nu	WEX438013	Using waste exemption	On a farm	Use of waste for a specified purpose
B	On site	Elton Lane Farm, Elton Lane, Elton, Chester, Ch2 4nu	WEX438013	Storing waste exemption	On a farm	Storage of waste in a secure place
B	On site	Elton Lane Farm, Elton Lane, Elton, Chester, Ch2 4nu	WEX438013	Using waste exemption	On a farm	Use of waste in construction
B	On site	Elton Lane Farm, Elton Lane, Elton, Chester, Ch2 4nu	WEX438013	Treating waste exemption	On a farm	Screening and blending of waste
B	On site	Elton Lane Farm, Elton Lane, Elton, Chester, Ch2 4nu	WEX438013	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
C	On site	-	WEX423709	Storing waste exemption	Not on a farm	Storage of waste in a secure place
C	On site	-	WEX423709	Using waste exemption	Not on a farm	Use of waste in construction
C	On site	-	WEX423709	Treating waste exemption	Not on a farm	Screening and blending of waste
D	220m SE	New Dairy Farm Elton Chester Cheshire Ch2 4lj	EPR/ZE5247NY /A001	Disposing of waste exemption	Agricultural waste only	Burning waste in the open
D	220m SE	New Dairy Farm Elton Chester Cheshire Ch2 4lj	EPR/ZE5247NY /A001	Using waste exemption	Agricultural waste only	Spreading waste on agricultural land to confer benefit
D	220m SE	New Dairy Farm Elton Chester Cheshire Ch2 4lj	EPR/ZE5247NY /A001	Storing waste exemption	Agricultural waste only	Storage of waste in a secure place
D	220m SE	New Dairy Farm Elton Chester Cheshire Ch2 4lj	EPR/ZE5247NY /A001	Using waste exemption	Agricultural waste only	Use of waste in construction



ID	Location	Site	Reference	Category	Sub-Category	Description
D	220m SE	New Dairy Farm Elton Chester Cheshire Ch2 4lj	EPR/ZE5247NY /A001	Using waste exemption	Both agricultural and non- agricultural waste	Use of waste for a specified purpose
E	242m S	Village Green Farm Ince	EPR/CE5487ZA /A001	Storing waste exemption	Non- agricultural waste only	Storage of sludge
E	242m S	Land At Thornton-Le-Moor	EPR/WE5885Q T/A001	Storing waste exemption	Non- agricultural waste only	Storage of sludge
5	283m S	Land At Thornton-Le-Moor	EPR/AE5885Q F/A001	Storing waste exemption	Non- agricultural waste only	Storage of sludge
7	334m S	Thornton Green Lane, Thornton-Le-Moors, Chester, Ch2 4jq	WEX431185	Using waste exemption	Not on a farm	Burning of waste as a fuel in a small appliance
F	354m N	-	WEX263138	Using waste exemption	On a farm	Use of waste for a specified purpose
F	354m N	-	WEX263138	Using waste exemption	On a farm	Use of waste in construction
F	354m N	7, Pool Lane, Ince, Chester, Ch2 4nx	WEX123609	Using waste exemption	On a farm	Use of waste in construction
F	354m N	7, Pool Lane, Ince, Chester, Ch2 4nx	WEX123609	Using waste exemption	On a farm	Use of waste for a specified purpose
F	380m N	7 Pool Lane Chester Ch2 4nx	EPR/PF0900XN /A001	Using waste exemption	Both agricultural and non- agricultural waste	Use of waste in construction
G	381m N	Lower Green Farm Station Road Chester Ch2 4nj	EPR/NF0802M L/A001	Disposing of waste exemption	Non- agricultural waste only	Deposit of waste from dredging of inland waters
G	381m N	Lower Green Farm Station Road Chester Ch2 4nj	EPR/NF0802M L/A001	Storing waste exemption	Non- agricultural waste only	Storage of waste in secure containers
G	381m N	Lower Green Farm Station Road Chester Ch2 4nj	EPR/NF0802M L/A001	Storing waste exemption	Non- agricultural waste only	Storage of waste in a secure place



ID	Location	Site	Reference	Category	Sub-Category	Description
G	381m N	Lower Green Farm Station Road Chester Ch2 4nj	EPR/NF0802M L/A001	Storing waste exemption	Non- agricultural waste only	Storage of sludge
G	381m N	Lower Green Farm Station Road Chester Ch2 4nj	EPR/NF0802M L/A001	Treating waste exemption	Non- agricultural waste only	Cleaning, washing, spraying or coating relevant waste
G	381m N	Lower Green Farm Station Road Chester Ch2 4nj	EPR/NF0802M L/A001	Treating waste exemption	Non- agricultural waste only	Aerobic composting and associated prior treatment
G	381m N	Lower Green Farm Station Road Chester Ch2 4nj	EPR/NF0802M L/A001	Treating waste exemption	Non- agricultural waste only	Preparatory treatments (baling, sorting, shredding etc)
G	381m N	Lower Green Farm Station Road Chester Ch2 4nj	EPR/NF0802M L/A001	Treating waste exemption	Non- agricultural waste only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
G	381m N	Lower Green Farm Station Road Chester Ch2 4nj	EPR/NF0802M L/A001	Using waste exemption	Non- agricultural waste only	Use of waste in construction
G	381m N	Lower Green Farm Station Road Chester Ch2 4nj	EPR/NF0802M L/A001	Using waste exemption	Non- agricultural waste only	Spreading of plant matter to confer benefit
G	381m N	Lower Green Farm Station Road Chester Ch2 4nj	EPR/NF0802M L/A001	Using waste exemption	Non- agricultural waste only	Incorporation of ash into soil
G	381m N	Lower Green Farm Station Road Chester Ch2 4nj	EPR/NF0802M L/A001	Using waste exemption	Non- agricultural waste only	Use of baled end-of-life tyres in construction
G	381m N	Lower Green Farm Station Road Chester Ch2 4nj	EPR/NF0802M L/A001	Using waste exemption	Non- agricultural waste only	Use of waste in the construction of entertainment or educational installations etc
G	381m N	Lower Green Farm Station Road Chester Ch2 4nj	EPR/NF0802M L/A001	Using waste exemption	Non- agricultural waste only	Use of waste for a specified purpose
G	381m N	Lower Green Farm Station Road Chester Ch2 4nj	EPR/NF0802M L/A001	Disposing of waste exemption	Non- agricultural waste only	Disposal by incineration
G	381m N	Lower Green Farm Station Road Chester Ch2 4nj	EPR/NF0802M L/A001	Disposing of waste exemption	Non- agricultural waste only	Burning waste in the open



ID	Location	Site	Reference	Category	Sub-Category	Description
G	381m N	Lower Green Farm Station Road Chester Ch2 4nj	EPR/NF0802M L/A001	Treating waste exemption	Non-agricultural waste only	Treatment of waste food
G	381m N	Lower Green Farm Station Road Chester Ch2 4nj	EPR/NF0802M L/A001	Treating waste exemption	Non-agricultural waste only	Physical treatment of waste edible oil and fat to produce biodiesel
G	381m N	Lower Green Farm Station Road Chester Ch2 4nj	EPR/NF0802M L/A001	Treating waste exemption	Non-agricultural waste only	Anaerobic digestion at premises used for agriculture and burning of resultant biogas
G	381m N	Lower Green Farm Station Road Chester Ch2 4nj	EPR/NF0802M L/A001	Treating waste exemption	Non-agricultural waste only	Treatment of waste in a biobed or biofilter
G	381m N	Lower Green Farm Station Road Chester Ch2 4nj	EPR/NF0802M L/A001	Treating waste exemption	Non-agricultural waste only	Screening and blending of waste
G	381m N	Lower Green Farm Station Road Chester Ch2 4nj	EPR/NF0802M L/A001	Using waste exemption	Non-agricultural waste only	Spreading waste on agricultural land to confer benefit
G	381m N	Lower Green Farm Station Road Chester Ch2 4nj	EPR/NF0802M L/A001	Using waste exemption	Non-agricultural waste only	Use of mulch
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX118107	Disposing of waste exemption	On a farm	Disposal by incineration
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX118107	Disposing of waste exemption	On a farm	Burning waste in the open
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX118107	Treating waste exemption	On a farm	Treatment of waste food
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX118107	Treating waste exemption	On a farm	Treatment of waste in a biobed or biofilter
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX118107	Treating waste exemption	On a farm	Screening and blending of waste
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX118107	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit



ID	Location	Site	Reference	Category	Sub-Category	Description
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX118107	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX118107	Storing waste exemption	On a farm	Storage of waste in secure containers
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX118107	Storing waste exemption	On a farm	Storage of waste in a secure place
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX118107	Storing waste exemption	On a farm	Storage of sludge
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX118107	Treating waste exemption	On a farm	Cleaning, washing, spraying or coating relevant waste
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX118107	Treating waste exemption	On a farm	Aerobic composting and associated prior treatment
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX118107	Treating waste exemption	On a farm	Preparatory treatments (baling, sorting, shredding etc)
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX118107	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX118107	Using waste exemption	On a farm	Use of waste in construction
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX118107	Using waste exemption	On a farm	Spreading of plant matter to confer benefit
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX118107	Using waste exemption	On a farm	Incorporation of ash into soil
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX118107	Using waste exemption	On a farm	Use of baled end-of-life tyres in construction
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX118107	Using waste exemption	On a farm	Use of waste for a specified purpose



ID	Location	Site	Reference	Category	Sub-Category	Description
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX259525	Storing waste exemption	On a farm	Storage of sludge
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX259525	Storing waste exemption	On a farm	Storage of waste in a secure place
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX259525	Storing waste exemption	On a farm	Storage of waste in secure containers
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX259525	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX259525	Treating waste exemption	On a farm	Aerobic composting and associated prior treatment
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX259525	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX259525	Treating waste exemption	On a farm	Preparatory treatments (baling, sorting, shredding etc)
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX259525	Treating waste exemption	On a farm	Cleaning, washing, spraying or coating relevant waste
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX259525	Using waste exemption	On a farm	Incorporation of ash into soil
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX259525	Using waste exemption	On a farm	Spreading of plant matter to confer benefit
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX259525	Using waste exemption	On a farm	Use of waste for a specified purpose
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX259525	Using waste exemption	On a farm	Use of baled end-of-life tyres in construction
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX259525	Using waste exemption	On a farm	Use of waste in construction



ID	Location	Site	Reference	Category	Sub-Category	Description
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX259525	Disposing of waste exemption	On a farm	Burning waste in the open
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX259525	Disposing of waste exemption	On a farm	Disposal by incineration
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX259525	Treating waste exemption	On a farm	Treatment of waste in a biobed or biofilter
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX259525	Treating waste exemption	On a farm	Treatment of waste food
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX259525	Treating waste exemption	On a farm	Screening and blending of waste
F	391m N	Lower Green Farm, Station Road, Ince, Chester, Ch2 4nj	WEX259525	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
F	394m N	Village Green Farm, The Square, Ince, Chester, Ch2 4nn	WEX460892	Disposing of waste exemption	On a farm	Burning waste in the open
F	394m N	Village Green Farm, The Square, Ince, Chester, Ch2 4nn	WEX460892	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
H	413m SE	Land At Ngr: Sj4539074790 Village Green Farm Frodsham	EPR/GE5647T V/A001	Storing waste exemption	Non-agricultural waste only	Storage of sludge
H	413m SE	Village Farm Ince	EPR/PE5782XB /A001	Storing waste exemption	Non-agricultural waste only	Storage of sludge
F	421m N	Village Green Farm The Square Chester Cheshire Ch2 4nn	EPR/AH0573Z H/A001	Treating waste exemption	Both agricultural and non-agricultural waste	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
F	421m N	Village Green Farm The Square Chester Cheshire Ch2 4nn	EPR/AH0573Z H/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste in construction



ID	Location	Site	Reference	Category	Sub-Category	Description
F	421m N	Village Green Farm The Square Chester Cheshire Ch2 4nn	EPR/AH0573Z H/A001	Using waste exemption	Both agricultural and non-agricultural waste	Spreading of plant matter to confer benefit
F	421m N	Village Green Farm The Square Chester Cheshire Ch2 4nn	EPR/AH0573Z H/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste for a specified purpose
F	421m N	Village Green Farm The Square Chester Cheshire Ch2 4nn	EPR/AH0573Z H/A001	Disposing of waste exemption	Both agricultural and non-agricultural waste	Burning waste in the open
F	421m N	Village Green Farm The Square Chester Cheshire Ch2 4nn	EPR/AH0573Z H/A001	Using waste exemption	Both agricultural and non-agricultural waste	Spreading waste on agricultural land to confer benefit
F	424m N	Village Green Farm, The Square, Ince, Chester, Ch2 4nn	WEX153384	Using waste exemption	On a farm	Use of waste for a specified purpose
F	424m N	Village Green Farm, The Square, Ince, Chester, Ch2 4nn	WEX195538	Disposing of waste exemption	On a farm	Burning waste in the open
F	424m N	Village Green Farm, The Square, Ince, Chester, Ch2 4nn	WEX195538	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
F	424m N	Village Green Farm, The Square, Ince, Chester, Ch2 4nn	WEX031751	Disposing of waste exemption	On a farm	Burning waste in the open
F	424m N	Village Green Farm, The Square, Ince, Chester, Ch2 4nn	WEX031751	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
F	424m N	Village Green Farm, The Square, Ince, Chester, Ch2 4nn	WEX325386	Disposing of waste exemption	On a farm	Burning waste in the open
F	424m N	Village Green Farm, The Square, Ince, Chester, Ch2 4nn	WEX325386	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit

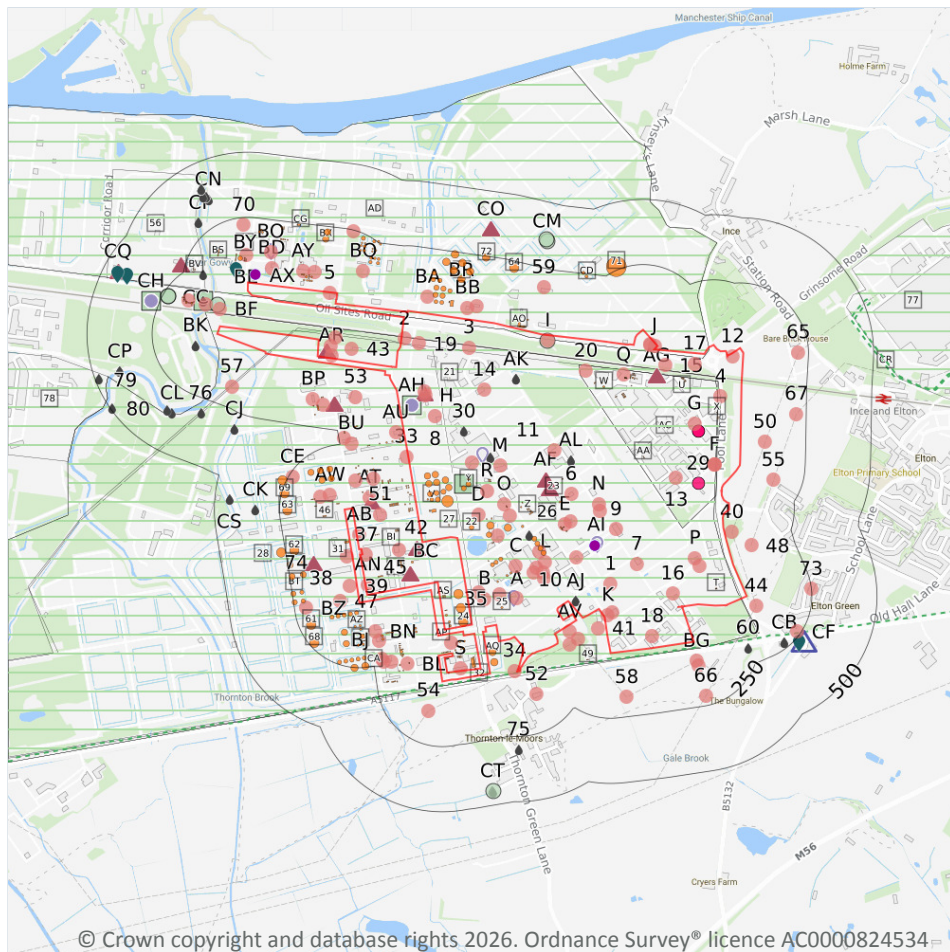


ID	Location	Site	Reference	Category	Sub-Category	Description
F	424m N	Village Green Farm, The Square, Ince, Chester, Ch2 4nn	WEX031751	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
F	424m N	Village Green Farm, The Square, Ince, Chester, Ch2 4nn	WEX031751	Using waste exemption	On a farm	Use of waste in construction
F	424m N	Village Green Farm, The Square, Ince, Chester, Ch2 4nn	WEX031751	Using waste exemption	On a farm	Spreading of plant matter to confer benefit
F	424m N	Village Green Farm, The Square, Ince, Chester, Ch2 4nn	WEX031751	Using waste exemption	On a farm	Burning of waste as a fuel in a small appliance
F	424m N	Village Green Farm, The Square, Ince, Chester, Ch2 4nn	WEX031751	Using waste exemption	On a farm	Use of waste for a specified purpose
9	485m S	Village Green Farm The Square Chester Cheshire Ch2 4nn	EPR/FF0302CQ /A001	Storing waste exemption	Non-agricultural waste only	Storage of sludge

This data is sourced from the Environment Agency and Natural Resources Wales.



4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- NGD current or recent tanks
- ▲ Current or recent petrol stations
- Electricity cables
- Control of Major Accident Hazards
- ▲ Hazardous substance storage/usage
- Historical licensed industrial activities
- Part A(1) industrial activities
- Licensed pollutant release (Part A(2)/B)
- Radioactive Substance Authorisations
- Licensed Discharges to controlled waters
- List 2 Dangerous Substances
- Pollution Incidents (EA/NRW)
- Pollution inventory substances
- Pollution inventory waste transfers

4.1 Recent industrial land uses

Records within 250m

127

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on [page 167 >](#)

ID	Location	Company	Address	Activity	Category
1	On site	Cooling Towers	Cheshire, CH2	Chimneys	Industrial Features
2	On site	Gantry	Cheshire, CH65	Travelling Cranes and Gantries	Industrial Features



ID	Location	Company	Address	Activity	Category
3	On site	Stanlow & Thornton Rail Station	Cheshire, CH65	Railway Stations, Junctions and Halts	Public Transport, Stations and Infrastructure
4	On site	M J Lighting	Thornton Science Park, 160 Pool Lane, Ince, Chester, Cheshire, CH2 4NU	Lampshades and Lighting	Consumer Products
5	On site	Electricity Sub Station	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
6	On site	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
7	On site	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
8	On site	Electricity Sub Station	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
9	On site	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
10	On site	Electricity Sub Stations	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
11	On site	Electricity Sub Stations	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
12	On site	Mast (Telecommunication)	Cheshire, CH2	Telecommunications Features	Infrastructure and Facilities
13	On site	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
14	On site	Electricity Sub Stations	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
15	On site	Mast (Telecommunication)	Cheshire, CH2	Telecommunications Features	Infrastructure and Facilities
16	On site	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
17	On site	Mast (Telecommunication)	Cheshire, CH2	Telecommunications Features	Infrastructure and Facilities
18	On site	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities



ID	Location	Company	Address	Activity	Category
19	On site	Pylon	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
20	On site	Pylon	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
A	On site	Chimney	Cheshire, CH2	Chimneys	Industrial Features
B	On site	Cooling Tower	Cheshire, CH2	Chimneys	Industrial Features
B	On site	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
C	On site	Chimney	Cheshire, CH2	Chimneys	Industrial Features
C	On site	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
D	On site	Cooling Tower	Cheshire, CH65	Chimneys	Industrial Features
D	On site	Electricity Sub Station	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
E	On site	Chimney	Cheshire, CH2	Chimneys	Industrial Features
E	On site	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
F	On site	Altimex Fibre Ltd	University of Chester Thornton Science Park, Pool Lane, Ince, Chester, Cheshire, CH2 4NU	Cable, Wire and Fibre Optics	Industrial Products
F	On site	Bakerrisk Europe Ltd	University of Chester Thornton Science Park, Pool Lane, Ince, Chester, Cheshire, CH2 4NU	Civil Engineers	Engineering Services
F	On site	Wood Group UK Ltd	University of Chester Thornton Science Park, Pool Lane, Ince, Chester, Cheshire, CH2 4NU	Special Purpose Machinery and Equipment	Industrial Products
G	On site	Byotrol	Building 303 Thornton Science Park, Pool Lane, Ince, Chester, Cheshire, CH2 4NU	Medical Equipment, Supplies and Pharmaceuticals	Industrial Products
H	On site	Hertel	Stanlow Oil Refinery, Ellesmere Port, Cheshire, CH65 4HB	Industrial Engineers	Engineering Services
H	On site	Sunbelt Rentals Ltd	Stanlow Refinery, Ellesmere Port, Cheshire, CH65 4HB	Construction and Tool Hire	Hire Services
I	On site	Essar Oil UK Ltd	Stanlow Refinery, Oil Sites Road, Ellesmere Port, Cheshire, CH65 4BF	Oil and Gas Extraction, Refinery and Product Manufacture	Extractive Industries



ID	Location	Company	Address	Activity	Category
J	On site	Electricity Sub Station	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
J	On site	Mast	Cheshire, CH65	Telecommunications Features	Infrastructure and Facilities
J	On site	Pylon	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
K	On site	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
K	On site	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
L	On site	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
L	On site	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
L	On site	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
L	On site	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
L	On site	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
L	On site	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
M	On site	Electricity Sub Station	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
M	On site	Electricity Sub Station	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
N	On site	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
N	On site	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
O	On site	Electricity Sub Stations	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
O	On site	Electricity Sub Stations	Cheshire, CH65	Electrical Features	Infrastructure and Facilities



ID	Location	Company	Address	Activity	Category
P	On site	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
P	On site	Mast	Cheshire, CH2	Telecommunications Features	Infrastructure and Facilities
Q	On site	Mast (Telecommunication)	Cheshire, CH2	Telecommunications Features	Infrastructure and Facilities
R	On site	Flare Stack	Cheshire, CH65	Gas Features	Infrastructure and Facilities
33	8m W	Electricity Sub Station	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
AN	9m E	Chimney	Cheshire, CH65	Chimneys	Industrial Features
AB	10m E	Electricity Sub Station	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
34	10m W	Pylon	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
AR	10m N	Electricity Sub Station	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
S	11m N	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
37	15m E	Electricity Sub Stations	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
38	19m W	Electricity Sub Stations	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
AV	23m SE	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
39	26m W	Electricity Sub Station	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
40	28m E	Pylon	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
AU	31m W	Electricity Sub Stations	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
41	33m W	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
S	35m S	Chimney	Cheshire, CH2	Chimneys	Industrial Features
BB	44m N	Electricity Sub Station	Cheshire, CH65	Electrical Features	Infrastructure and Facilities



ID	Location	Company	Address	Activity	Category
AR	46m N	Electricity Sub Station	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
AV	47m E	Pylon	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
43	48m N	Electricity Sub Station	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
44	52m SE	Pylon	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
BB	57m N	Electricity Sub Station	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
BA	64m N	Electricity Sub Station	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
AV	65m SE	Pylon	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
AR	66m E	Pylon	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
BD	66m N	Chimney	Cheshire, CH65	Chimneys	Industrial Features
BF	68m N	Mast (Telecommunication)	Cheshire, CH65	Telecommunications Features	Infrastructure and Facilities
AY	68m N	Chimney	Cheshire, CH2	Chimneys	Industrial Features
AY	69m N	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
47	73m W	Electricity Sub Stations	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
BG	74m S	Pylon	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
AT	78m NE	Chimney	Cheshire, CH65	Chimneys	Industrial Features
AW	79m NW	Electricity Sub Stations	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
48	87m E	Pylon	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
BG	93m S	Mast	Cheshire, CH2	Telecommunications Features	Infrastructure and Facilities
50	94m E	Pylon	Cheshire, CH2	Electrical Features	Infrastructure and Facilities



ID	Location	Company	Address	Activity	Category
BC	97m W	Electricity Sub Station	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
51	102m E	Electricity Sub Stations	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
BF	102m NW	Gantry	Cheshire, CH65	Travelling Cranes and Gantries	Industrial Features
BE	104m N	Electricity Sub Station	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
AT	105m N	Electricity Sub Stations	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
AW	106m NW	Cooling Tower	Cheshire, CH65	Chimneys	Industrial Features
52	111m SE	Telephone Exchange	Cheshire, CH2	Telecommunications Features	Infrastructure and Facilities
53	114m S	Chimney	Cheshire, CH65	Chimneys	Industrial Features
BN	118m S	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
BL	123m W	Chimney	Cheshire, CH2	Chimneys	Industrial Features
54	123m SW	Pylon	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
BO	128m N	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
BQ	131m NE	Electricity Sub Station	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
AT	139m NE	Electricity Sub Stations	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
55	141m SE	Pylon	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
BP	143m S	Electricity Sub Station	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
BN	156m S	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
BF	157m NW	Cooling Tower	Cheshire, CH65	Chimneys	Industrial Features
BP	159m S	Cooling Tower	Cheshire, CH65	Chimneys	Industrial Features



ID	Location	Company	Address	Activity	Category
57	170m S	Outfall	Cheshire, CH65	Waste Storage, Processing and Disposal	Infrastructure and Facilities
58	175m S	Pylon	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
59	177m N	Electricity Sub Station	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
BL	183m W	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
BZ	205m W	Electricity Sub Stations	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
BU	207m W	Electricity Sub Stations	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
65	211m E	Pylon	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
66	213m S	Pylon	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
67	213m E	Pylon	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
BL	213m W	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
BL	219m W	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
70	222m N	Electricity Sub Station	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
BU	229m W	Electricity Sub Stations	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
CE	236m NW	Electricity Sub Stations	Cheshire, CH65	Electrical Features	Infrastructure and Facilities
CF	237m SE	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities
BQ	247m N	Slurry Bed	Cheshire, CH65	Waste Storage, Processing and Disposal	Infrastructure and Facilities
73	248m E	Electricity Sub Station	Cheshire, CH2	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey®.



4.2 National Geographic Database (NGD) - Current or recent tanks

Records within 250m	388
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Current or recent tanks identified from the Ordnance Survey® NGD.

Features are displayed on the Current industrial land use map on [page 167 >](#)

ID	Location	Tank description	Activity	Date first identified
21	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	04/01/2006
22	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	13/01/2006
23	On site	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
24	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
25	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	12/01/2006
26	On site	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
27	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
C	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
C	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
C	On site	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
C	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
C	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	12/01/2006
C	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
C	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
C	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
C	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
D	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
D	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
D	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
D	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
D	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
E	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
E	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
E	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018



ID	Location	Tank description	Activity	Date first identified
E	On site	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
E	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
E	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
L	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
L	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
L	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2001
L	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
L	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
O	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
O	On site	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2001
Q	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
Q	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
Q	On site	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2001
Q	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
Q	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
Q	On site	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2001
Q	On site	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2001
Q	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	20/04/1999
Q	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
Q	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
Q	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	20/04/1999
Q	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
Q	On site	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2001
Q	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
Q	On site	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2001
Q	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
Q	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
Q	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970



ID	Location	Tank description	Activity	Date first identified
Q	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
Q	On site	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2001
Q	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
Q	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	20/04/1999
Q	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
Q	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	20/04/1999
Q	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
Q	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
Q	On site	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2001
Q	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
Q	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
Q	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
Q	On site	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2001
Q	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	14/04/1999
Q	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
R	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	24/06/2015
R	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	24/06/2015
R	On site	Open Storage Tank	Commercial Activity: Distribution Or Storage	24/06/2015
R	On site	Open Storage Tank	Commercial Activity: Distribution Or Storage	24/06/2015
S	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
S	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
T	On site	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
T	On site	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
T	On site	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
T	On site	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
U	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	14/04/1999
U	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	14/04/1999
U	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	14/04/1999



ID	Location	Tank description	Activity	Date first identified
U	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	14/04/1999
U	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	14/04/1999
V	On site	Roofed Sludge Tank	Utility Or Environmental Protection	25/09/1986
V	On site	Roofed Sludge Tank	Utility Or Environmental Protection	25/09/1986
V	On site	Roofed Sludge Tank	Utility Or Environmental Protection	08/11/1994
V	On site	Roofed Sludge Tank	Utility Or Environmental Protection	31/07/1986
V	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	25/09/1986
V	On site	Roofed Sludge Tank	Utility Or Environmental Protection	31/07/1986
V	On site	Roofed Sludge Tank	Utility Or Environmental Protection	25/09/1986
V	On site	Roofed Sludge Tank	Utility Or Environmental Protection	25/09/1986
V	On site	Roofed Sludge Tank	Utility Or Environmental Protection	08/11/1994
V	On site	Roofed Sludge Tank	Utility Or Environmental Protection	25/09/1986
V	On site	Roofed Sludge Tank	Utility Or Environmental Protection	31/07/1986
V	On site	Roofed Sludge Tank	Utility Or Environmental Protection	31/07/1986
V	On site	Open Sludge Tank	Utility Or Environmental Protection	31/07/2001
V	On site	Open Sludge Tank	Utility Or Environmental Protection	31/07/2001
V	On site	Open Sludge Tank	Utility Or Environmental Protection	31/07/2001
V	On site	Roofed Sludge Tank	Utility Or Environmental Protection	25/09/1986
W	On site	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2001
W	On site	Open Storage Tank	Commercial Activity: Distribution Or Storage	06/07/2015
X	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	04/01/2006
X	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	20/04/1999
X	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	20/04/1999
Y	On site	Roofed Sludge Tank	Utility Or Environmental Protection	01/01/1970
Y	On site	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
Y	On site	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
Y	On site	Roofed Sludge Tank	Utility Or Environmental Protection	01/01/1970
Z	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018



ID	Location	Tank description	Activity	Date first identified
Z	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
Z	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
Z	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
Z	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
Z	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
Z	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AA	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AA	On site	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AM	1m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
S	2m E	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
S	3m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
S	3m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
S	3m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
31	3m W	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AN	5m E	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AO	6m N	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
S	6m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AP	7m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
S	7m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
S	7m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
S	7m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
S	7m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
S	7m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
S	7m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AM	7m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	05/12/2023
AO	7m N	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AO	7m N	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AQ	8m E	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970



ID	Location	Tank description	Activity	Date first identified
AQ	8m E	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
AO	9m N	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AM	9m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
AP	10m E	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
AS	11m E	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	18/01/2021
AO	11m N	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AO	11m N	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AP	11m E	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AO	11m N	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AO	12m N	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AT	13m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AO	13m N	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
S	14m NE	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
35	14m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
36	15m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	25/09/1986
AT	15m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	25/09/1986
AT	16m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	25/09/1986
S	16m E	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AT	16m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	25/09/1986
AU	16m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	31/07/1986
AT	16m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	25/09/1986
AU	17m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	31/07/1986
AP	17m E	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
AS	18m E	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
S	19m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	09/01/2006
S	20m E	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AT	21m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AT	22m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018



ID	Location	Tank description	Activity	Date first identified
AT	23m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	25/09/1986
AT	23m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	25/09/1986
S	24m E	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AT	24m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	25/09/1986
AT	24m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	25/09/1986
S	26m SW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	09/01/2006
AT	28m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	25/09/1986
S	29m E	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AW	30m NW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	13/01/2006
AY	32m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AY	32m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AY	32m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AY	32m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AZ	33m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
S	35m NE	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AT	36m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	04/01/2006
AT	39m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AO	41m N	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2001
BA	41m N	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AY	42m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	11/01/2021
BA	43m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
BA	43m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
AY	43m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
S	44m E	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AU	47m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	18/01/2021
AY	47m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AY	47m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	11/01/2021
AZ	48m SW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970



ID	Location	Tank description	Activity	Date first identified
45	52m E	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AY	52m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BA	53m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
AY	53m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AY	54m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AT	64m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	18/01/2021
BA	66m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
BA	66m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
AT	67m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	19/04/1999
AZ	68m SW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
AE	68m E	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AU	70m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	18/01/2021
AT	71m NE	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	18/01/2021
46	73m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AT	73m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	19/04/1999
AE	75m E	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BH	77m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	09/01/2006
BH	77m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	09/01/2006
BC	79m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	25/09/1986
AT	79m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	19/04/1999
BC	81m SW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	25/11/2023
BI	81m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AE	81m E	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BE	82m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AT	82m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	18/01/2021
BE	83m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BJ	84m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
AT	85m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	19/04/1999



ID	Location	Tank description	Activity	Date first identified
BI	87m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BE	87m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BH	88m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	09/01/2006
BC	88m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	25/09/1986
49	88m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BE	89m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	09/01/2006
BE	89m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AT	89m NE	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	18/01/2021
BJ	89m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
AZ	89m SW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
AT	89m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	04/01/2006
BA	91m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
AT	91m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	19/04/1999
BI	92m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BD	93m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BA	94m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
BA	94m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
BE	94m NW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BE	94m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BC	96m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	25/09/1986
AT	97m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	19/04/1999
BE	97m NW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AU	98m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	25/11/2023
AY	98m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	11/01/2021
BJ	99m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BE	101m NW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BC	105m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	25/09/1986
BE	105m NW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018



ID	Location	Tank description	Activity	Date first identified
AW	108m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BE	110m NW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AZ	112m SW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
AT	112m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BL	114m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BE	115m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BJ	116m SW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BM	117m NW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	31/07/1986
AT	118m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	18/01/2021
AT	118m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	18/01/2021
AW	120m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BJ	121m S	Open Storage Tank	Commercial Activity: Distribution Or Storage	30/06/2015
BA	125m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
BA	125m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
AW	125m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BP	129m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BM	130m NW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	25/09/1986
BP	131m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AT	131m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BN	131m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BN	131m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BL	133m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2001
BF	133m NW	Open Storage Tank	Commercial Activity: Distribution Or Storage	31/07/2001
AT	134m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	25/11/2023
BR	135m N	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BL	135m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2001
BN	136m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BF	136m NW	Open Storage Tank	Commercial Activity: Distribution Or Storage	31/07/2001



ID	Location	Tank description	Activity	Date first identified
BL	137m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AU	137m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	25/11/2023
BL	138m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2001
AT	138m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	18/01/2021
BL	140m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BL	141m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2001
AU	144m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	25/11/2023
BJ	146m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BL	148m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BL	149m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BL	149m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BN	149m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BA	149m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
BL	149m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
AT	149m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BS	152m NW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	11/01/2021
BM	153m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	25/09/1986
AT	153m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	18/01/2021
BJ	154m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BF	155m NW	Open Storage Tank	Commercial Activity: Distribution Or Storage	31/07/2001
BL	155m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BS	155m NW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	11/01/2021
BJ	156m S	Roofed Slurry Storage Tank	Agriculture Or Aquaculture	01/01/1970
BS	159m NW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	11/01/2021
BJ	159m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BS	161m NW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	11/01/2021
AT	162m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	18/01/2021
BM	164m NW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	25/09/1986



ID	Location	Tank description	Activity	Date first identified
BP	164m S	Open Storage Tank	Commercial Activity: Distribution Or Storage	31/07/2001
BR	164m N	Open Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
BQ	166m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
BQ	167m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
BP	168m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	25/09/1986
BP	168m S	Open Storage Tank	Commercial Activity: Distribution Or Storage	31/07/2001
BF	168m NW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	05/01/2006
BR	169m N	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BL	170m W	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BF	171m NW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	05/01/2006
BU	171m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BF	175m NW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BL	177m W	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BW	178m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BW	178m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BW	178m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BW	179m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BF	180m NW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BM	181m NW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	25/09/1986
BQ	182m NE	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
BQ	183m NE	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	09/01/2006
BQ	183m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
BL	184m W	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BQ	185m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
BT	185m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BT	186m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
61	186m SW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BQ	188m NE	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988



ID	Location	Tank description	Activity	Date first identified
BX	189m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	28/03/1988
BR	192m N	Open Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
BY	194m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	11/01/2021
BY	194m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	11/01/2021
BR	197m N	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
62	198m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BP	200m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	30/06/2015
BQ	201m NE	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	09/01/2006
63	202m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BQ	203m NE	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
BL	203m W	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
BY	203m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	11/01/2021
BZ	205m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BZ	205m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
CA	205m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BL	206m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
64	206m N	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BQ	206m NE	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
BV	208m W	Open Storage Tank	Commercial Activity: Distribution Or Storage	31/07/2001
CA	209m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BV	211m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	19/01/2021
BQ	212m NE	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
68	214m SW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BV	214m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
CA	215m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BV	215m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BQ	215m NE	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
BX	216m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	28/03/1988



ID	Location	Tank description	Activity	Date first identified
BQ	216m NE	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
BQ	217m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
BW	219m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	11/01/2021
BW	219m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	11/01/2021
69	221m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
CA	223m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BU	223m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/08/2018
71	225m NW	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BQ	225m NE	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
BR	226m N	Open Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
BT	229m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BT	229m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
CA	231m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
72	231m N	Open Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
CA	233m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
CD	234m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BZ	236m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BZ	236m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
CA	237m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BQ	238m NE	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
CG	240m N	Open Storage Tank	Commercial Activity: Distribution Or Storage	11/01/2021
CG	240m N	Open Storage Tank	Commercial Activity: Distribution Or Storage	11/01/2021
CG	241m N	Open Storage Tank	Commercial Activity: Distribution Or Storage	11/01/2021
BQ	242m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988
CE	245m NW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
CD	246m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
74	249m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/01/1970
BQ	250m NE	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	16/03/1988

This data is sourced from Ordnance Survey®.



4.3 Current or recent petrol stations

Records within 500m

1

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on [page 167 >](#)

ID	Location	Company	Address	LPG	Status
CF	279m SE	ESSAR	Bypass Road, Old Cryers Lane, Elton, Chester, Cheshire West And Chester, CH2 4LD	No	Closed

This data is sourced from Experian.

4.4 Electricity cables

Records within 500m

3

High voltage underground electricity transmission cables.

Features are displayed on the Current industrial land use map on [page 167 >](#)

ID	Location	Cable Set	Cable Route	Details	
32	6m S	-	-	Cable Make: - Cable Type: PILOT Operating Voltage (kV): -	Year of installation: Not specified Cable in tunnel? Not specified
CR	431m E	CAPENHURST 2 132KV CABLE B	INCE 132KV S/S	Cable Make: ABB XLPE CWS&P Cable Type: A/C Operating Voltage (kV): 132	Year of installation: 2005 Cable in tunnel? Not specified
CR	450m E	CAPENHURST 1 132KV CABLE B	INCE 132KV S/S	Cable Make: ABB XLPE CWS&P Cable Type: A/C Operating Voltage (kV): 132	Year of installation: 2005 Cable in tunnel? Not specified

This data is sourced from National Grid.

4.5 Gas pipelines

Records within 500m

0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.



4.6 Sites determined as Contaminated Land

Records within 500m

0

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.7 Control of Major Accident Hazards (COMAH)

Records within 500m

11

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

Features are displayed on the Current industrial land use map on [page 167 >](#)

ID	Location	Company	Address	Operational status	Tier
28	On site	Avanti Gas Limited	Avanti Gas Limited, Ellesmere Port, Britannia Road, Ellesmere Port, Cheshire, CH65 4HB	Current COMAH Site	COMAH Upper Tier Operator
AB	On site	Shell Gas Ltd	Shell Gas Ltd, Oilsites Road, Stanlow, Ellesmere Port	Historical NIHHS Site	-
AB	On site	Shell Gas Ltd (t/a Britannia [lpg] ltd)	Shell Gas Ltd (t/a Britannia [lpg] ltd), Stanlow Shell, Delivery Terminal, Stanlow South Refinery	Historical NIHHS Site	-
AC	On site	Shell Research Ltd	Shell Research Ltd, South Wirral/shell Research Ltd, Shell Technology Centre Thornton, T/a Global Solutions Uk, Pool Lane, Ince, Chester, Cheshire, CH2 4NU	Historical COMAH Site	-
AC	On site	Shell Research Ltd	Shell Research Ltd, Thornton Research And Technology Centre, Poole Lane, Ince, Thornton Le Moors, Cheshire, CH2 4NU	Historical COMAH Site	-
AD	On site	Stanlow Terminals Limited	Stanlow Terminals Limited, Stanlow, Stanlow Terminal, Gate 2, Oil Sites Road, Ellesmere Port, Wirral, CH65 4BD	Current COMAH Site	COMAH Upper Tier Operator
AD	On site	Stanlow Terminals Limited	Stanlow Terminals Limited, Stanlow, Stanlow Terminal, Gate 2, Oil Sites Road, Ellesmere Port, Wirral, CH65 4BD	Current COMAH Site	COMAH Upper Tier Operator
AE	On site	Essar Oil (UK) Limited	Essar Oil (UK) Limited, Stanlow, Stanlow Manufacturing Complex, PO Box 3, Ellesmere Port, Cheshire, CH65 4HB	Current COMAH Site	COMAH Upper Tier Operator



ID	Location	Company	Address	Operational status	Tier
56	153m N	Basf Coatings Ltd	Basf Coatings Ltd, Oil Sites Road, Ellesmere Port, L65 4EY	Historical NIHHS Site	-
77	433m NE	Encirc Limited	Encirc Limited, Chester, Ash Road, Elton, Chester, Cheshire, CH2 4LF	Current COMAH Site	COMAH Lower Tier Operator
78	450m W	Castrol Uk	Castrol Uk, Bridges Road, Ellesmere Port, CH65 4LW	Historical NIHHS Site	-

This data is sourced from the Health and Safety Executive.

4.8 Regulated explosive sites

Records within 500m

0

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.9 Hazardous substance storage/usage

Records within 500m

28

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

Features are displayed on the Current industrial land use map on [page 167 >](#)

ID	Location	Details	
H	On site	Application reference number: No Details Application status: Historical Consent Application date: No Details Address: Stanlow Terminals Limited, Stanlow Terminal, Gate No 2, Oil Sites Road, Ellesmere Port, Wirral, Cheshire, England, CH64 4BD	Details: No Details Enforcement: No Details Date of enforcement: No Details Comment: No Details
AF	On site	Application reference number: P/93/108/ST/709 Application status: Historical Consent Application date: 25/02/1994 Address: Shell Gas Limited t/a Britannia LPG Ltd, South Site, Stanlow Refinery, Oil Sites, Britannia Road, Ellesmere Port, Cheshire, CH65 4SA	Details: Deemed (amendment) Xylene Storage Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified



ID	Location	Details	
AF	On site	Application reference number: P/94/108/ST/50 Application status: Historical Consent Application date: 09/02/1994 Address: Shell UK Ltd, North Road, Ellesmere Port, Cheshire, CH65 1AB	Details: Replacement Dope Acid Plant and Storage Facilities Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
AF	On site	Application reference number: No Details Application status: Approved Application date: No Details Address: United Utilities Waste Management Limited, PO Box 17, Oil Sites Road, Ellesmere Port, Cheshire, England, CH65 4HF	Details: No Details. Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
AG	On site	Application reference number: 10/01256/HAZ Application status: Historical Consent Application date: 12/08/2010 Address: Shell Research Ltd, trading as Shell Global, Shell Technology Centre, Thornton, Pool Lane, Ince, Chester, Cheshire, CH2 4NU	Details: Storage of up to 30 tonnes of flammable substances Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
AG	On site	Application reference number: 10/01256/HAZ Application status: Approved Application date: 12/08/2010 Address: Shell Research Ltd, trading as Shell Global Solutions, Shell Technology Centre, Thornton, Pool Lane, Ince, Cheshire, England, CH2 4NU	Details: Storage of up to 30 tonnes of flammable substances Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
AR	24m N	Application reference number: 12/01152/HAZ Application status: Historical Consent Application date: 09/03/2012 Address: ESSAR Oil (UK) Ltd pka Shell UK Ltd, Shell Manufacturing Complex, Oil Sites Road, Stanlow, Ellesmere Port, South Wirral, England, CH65 4HB	Details: Storage of hazardous substances Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
AR	24m N	Application reference number: 11/04300/HAZ Application status: Historical Consent Application date: 18/11/2011 Address: Shell Gas Limited t/a Britannia LPG Ltd, South Site, Stanlow Refinery, Oil Sites, Britannia Road, Ellesmere Port, Cheshire, CH65 4SA	Details: Storage of 480 tonnes of highly flammable substances Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
AR	24m N	Application reference number: 11/03633/HAZ Application status: Historical Consent Application date: 27/10/2011 Address: Shell Gas Limited t/a Britannia LPG Ltd, South Site, Stanlow Refinery, Oil Sites, Britannia Road, Ellesmere Port, Cheshire, CH65 4SA	Details: Storage of 26.2 tonnes of toxic and dangerous for the environment substances Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified



ID	Location	Details	
AR	24m N	Application reference number: 11/03064/HAZ Application status: Historical Consent Application date: 06/09/2011 Address: Shell Gas Limited t/a Britannia LPG Ltd, South Site, Stanlow Refinery, Oil Sites, Britannia Road, Ellesmere Port, Cheshire, CH65 4SA	Details: Storage of 80 tonnes of ammonium polysulphide and 2 tonnes of AO-32 Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
AR	24m N	Application reference number: P/99/108/ST/644 Application status: Historical Consent Application date: 02/11/1999 Address: Shell Gas Limited t/a Britannia LPG Ltd, South Site, Stanlow Refinery, Oil Sites, Britannia Road, Ellesmere Port, Cheshire, CH65 4SA	Details: Claim for deemed hazardous substances consent Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
AR	24m N	Application reference number: P/99/114/XX/272 Application status: Historical Consent Application date: 13/07/1999 Address: Shell Gas Limited t/a Britannia LPG Ltd, South Site, Stanlow Refinery, Oil Sites, Britannia Road, Ellesmere Port, Cheshire, CH65 4SA	Details: Variation of existing consent Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
AR	24m N	Application reference number: 11/01792/HAZ Application status: Historical Consent Application date: 13/10/2011 Address: Essar Oil (UK) Ltd pka Shell UK Ltd, South Site, Stanlow Refinery, Oil Sites Road, Ellesmere Port, Cheshire, CH65 4HB	Details: Continuation of hazardous substances consent following a change in control of part of the land (section 17) Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
AR	24m N	Application reference number: 12/00056/HAZ Application status: Approved Application date: 25/01/2012 Address: Shell Gas Limited t/a Britannia LPG Ltd, Stanlow Terminal, Britannia Road, Ellesmere Port, South Wirral, England, CH2 4SA	Details: Storage of 2-ethylhexylnitrate (dangerous for the environment) Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
42	33m SW	Application reference number: 10/02312/HAZ Application status: Historical Consent Application date: 12/01/2011 Address: Shell Gas Limited t/a Britannia LPG Ltd, South Site, Stanlow Refinery, Oil Sites, Britannia Road, Ellesmere Port, Cheshire, CH65 4SA	Details: Storage of up to 20.5 tonnes of hydrogen Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
BC	50m N	Application reference number: P/2006/108/ST/839 Application status: Historical Consent Application date: 05/08/2008 Address: Shell Gas Limited t/a Britannia LPG Ltd, South Site, Stanlow Refinery, Oil Sites, Britannia Road, Ellesmere Port, Cheshire, CH65 4SA	Details: Hazardous Substances Consent for Hydrogen (max one tonne) with Additional Storage Areas for Hydrogen Trailers Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified



ID	Location	Details	
BC	50m N	Application reference number: P/2004/108/ST/329 Application status: Historical Consent Application date: 08/04/2004 Address: Shell Gas Limited t/a Britannia LPG Ltd, South Site, Stanlow Refinery, Oil Sites, Britannia Road, Ellesmere Port, Cheshire, CH65 4SA	Details: Continuation of Hazardous Substance Consent (P/99/644) with an Additional Storage Area for Solid Catalyst Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
AT	76m E	Application reference number: 12/02000/HAZ Application status: Historical Consent Application date: 27/04/2012 Address: Essar Oil (UK) Ltd pka Shell UK Ltd, Stanlow Manufacturing Complex, No. 4 Gate, Oil Sites Road, Ellesmere Port, Cheshire, CH65 4HB	Details: Storage of up to 595 tonnes of highly flammable substances Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
BP	153m S	Application reference number: HS4 Application status: Historical Consent Application date: No Details Address: Shell UK Ltd, Stanlow Manufacturing Complex, Oil Sites Road, Ellesmere Port, Cheshire, CH65 4HB	Details: Storage of petrol Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
BP	153m S	Application reference number: No Details Application status: Historical Consent Application date: No Details Address: Shell UK Ltd, Stanlow Manufacturing Complex, Oil Sites Road, Ellesmere Port, Cheshire, CH65 4HB	Details: Oil refinery Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
BP	153m S	Application reference number: P/99/108/ST/683 Application status: Historical Consent Application date: 09/11/1999 Address: Shell UK Ltd, Stanlow Manufacturing Complex, Oil Sites Road, Ellesmere Port, Cheshire, CH65 4HB	Details: Claim For Deemed Consent (Consultation from neighbouring authority) Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
BP	153m S	Application reference number: P/2003/108/ST/826 Application status: Historical Consent Application date: 26/01/2004 Address: Essar Oil (UK) Ltd pka Shell UK Ltd, Stanlow Manufacturing Complex, Oil Sites Road, Ellesmere Port, Cheshire, CH65 4HB	Details: Continuation of existing consent (P/99/108/ST/644) with Additional Storage Area for C4 to C6 Hydrocarbons, Hydrogen & Solid Catalyst Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
BT	153m W	Application reference number: 12/01338/HAZ Application status: Historical Consent Application date: 19/03/2012 Address: Essar Oil (UK) Ltd pka Shell UK Ltd, South Site, Stanlow Refinery, Oil Sites Road, Ellesmere Port, Cheshire, CH65 4HB	Details: Storage of up to 15440 tonnes of dangerous for the environment substances Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified



ID	Location	Details	
BV	266m W	Application reference number: P/2000/108/ST/69 Application status: Historical Consent Application date: 23/03/2000 Address: Essar Oil (UK) Ltd pka Shell UK Ltd, Stanlow Manufacturing Complex, Oil Sites Road, Ellesmere Port, Cheshire, CH65 4HB	Details: Application to vary existing consent Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
CO	355m N	Application reference number: 12/04285/HAZ Application status: Pending Application date: 21/09/2012 Address: Entrance 4, Stanlow Refinery, Oil Sites Road, Ellesmere Port, Cheshire, CH65 5BP	Details: Storage of 2,953,866 tonnes of substances classified as dangerous Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
CO	355m N	Application reference number: 12/04013/HAZ Application status: Pending Application date: 19/09/2012 Address: Entrance 4, Stanlow Refinery, Oil Sites Road, Ellesmere Port, Cheshire, CH65 5BP	Details: Storage of 60 tonnes of material classified as dangerous to the environment, bringing the total to 463,828 tonnes. Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
CO	355m N	Application reference number: 12/04011/HAZ Application status: Pending Application date: 19/09/2012 Address: Entrance 4, Stanlow Refinery, Oil Sites Road, Ellesmere Port, Cheshire, CH65 5BP	Details: Storage of 4 tonnes of a substance classified as very toxic to the aquatic environment, bringing the total to 15,450. Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
CQ	444m NW	Application reference number: P/96/108/ST/149 Application status: Historical Consent Application date: 24/05/1996 Address: ESSAE Oil (UK) Ltd pka Shell UK Ltd, Shell Gas Terminal, Oil Sites Road, Ellesmere Port, Cheshire, CH65 4BD	Details: Storage of LPG Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified

This data is sourced from Local Authority records.

4.10 Historical licensed industrial activities (IPC)

Records within 500m

75

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

Features are displayed on the Current industrial land use map on [page 167](#) >



ID	Location	Details	
AH	On site	Operator: Shell (UK) Ltd Address: Stanlow Manufacturing Complex, South Wirral, Merseyside, L65 4HB Process: Petrochemical Processes Permit Number: BK2852	Original Permit Number: IPCMINVAR Date Approved: - Effective Date: - Status: Effective
AH	On site	Operator: Shell Chemicals UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Combustion Processes Permit Number: AA1139	Original Permit Number: IPCAIRAPP Date Approved: 5-8-1992 Effective Date: 5-8-1992 Status: Superseded By Variation
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Combustion Processes Permit Number: AA2844	Original Permit Number: IPCAIRAPP Date Approved: 5-8-1992 Effective Date: 5-8-1992 Status: Superseded By Variation
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Petroleum Processes Permit Number: AF8246	Original Permit Number: IPCAIRAPP Date Approved: 9-12-1993 Effective Date: 20-12-1993 Status: Revoked
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Petroleum Processes Permit Number: AF8394	Original Permit Number: IPCAIRAPP Date Approved: 30-3-1994 Effective Date: 30-4-1994 Status: Superseded By Variation
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Recovery Processes Permit Number: AG8195	Original Permit Number: IPCAIRAPP Date Approved: 9-12-1993 Effective Date: 20-12-1993 Status: Superseded By Variation
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Petrochemical Processes Permit Number: AJ5720	Original Permit Number: IPCAIRAPP Date Approved: 17-3-1994 Effective Date: 31-3-1994 Status: Superseded By Variation
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Petrochemical Processes Permit Number: AJ5738	Original Permit Number: IPCAIRAPP Date Approved: 31-3-1994 Effective Date: 5-4-1994 Status: Superseded By Variation
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Combustion Processes Permit Number: AJ9873	Original Permit Number: IPCMINVAR Date Approved: 11-11-1993 Effective Date: 19-11-1993 Status: Revoked



ID	Location	Details	
AH	On site	Operator: Shell Chemicals UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Combustion Processes Permit Number: AJ9881	Original Permit Number: IPCMINVAR Date Approved: 11-11-1993 Effective Date: 11-11-1993 Status: Revoked
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Manufacture And Use Of Organic Chemicals Permit Number: AK3927	Original Permit Number: IPCAIRAPP Date Approved: 30-3-1994 Effective Date: 5-4-1994 Status: Superseded By Variation
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Manufacture And Use Of Organic Chemicals Permit Number: AK3935	Original Permit Number: IPCAIRAPP Date Approved: 17-3-1994 Effective Date: 31-3-1994 Status: Superseded By Variation
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Manufacture And Use Of Organic Chemicals Permit Number: AK3943	Original Permit Number: IPCAIRAPP Date Approved: 30-3-1994 Effective Date: 5-4-1994 Status: Superseded By Variation
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Manufacture And Use Of Organic Chemicals Permit Number: AK3951	Original Permit Number: IPCAIRAPP Date Approved: 17-3-1994 Effective Date: 31-3-1994 Status: Superseded By Variation
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Petrochemical Processes Permit Number: AN4369	Original Permit Number: IPCAIRAPP Date Approved: 25-3-1996 Effective Date: 29-3-1996 Status: Superseded By Variation
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Incineration Permit Number: AN4377	Original Permit Number: IPCMINVAR Date Approved: 18-11-1994 Effective Date: 21-11-1994 Status: Superseded By Variation
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Petroleum Processes Permit Number: AQ8727	Original Permit Number: IPCMINVAR Date Approved: 29-3-1995 Effective Date: 31-3-1995 Status: Superseded By Variation
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Petrochemical Processes Permit Number: AU6412	Original Permit Number: IPCMINVAR Date Approved: 25-3-1996 Effective Date: 29-3-1996 Status: Superseded By Variation



ID	Location	Details	
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Petrochemical Processes Permit Number: AU6439	Original Permit Number: IPCMINVAR Date Approved: 25-3-1996 Effective Date: 29-3-1996 Status: Superseded By Variation
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Manufacture And Use Of Organic Chemicals Permit Number: BC6497	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked - Now Ippc
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Manufacture And Use Of Organic Chemicals Permit Number: BC6519	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Manufacture And Use Of Organic Chemicals Permit Number: BC6527	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Manufacture And Use Of Organic Chemicals Permit Number: BC6535	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked - Now Ippc
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Petrochemical Processes Permit Number: BC8686	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked - Now Ippc
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Incineration Permit Number: BC8694	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Superseded By Variation
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Petroleum Processes Permit Number: BD1156	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Superseded By Variation
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Petrochemical Processes Permit Number: BD4139	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked



ID	Location	Details	
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Petrochemical Processes Permit Number: BD4147	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked - Now Ippc
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Petroleum Processes Permit Number: BH6834	Original Permit Number: IPCMINVAR Date Approved: 14-3-2000 Effective Date: 20-3-2000 Status: Superseded By Variation
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Recovery Processes Permit Number: BI9359	Original Permit Number: IPCMINVAR Date Approved: 28-7-2000 Effective Date: 28-7-2000 Status: Superseded By Variation
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Petroleum Processes Permit Number: BT7582	Original Permit Number: IPCMINVAR Date Approved: 30-3-2003 Effective Date: 1-4-2003 Status: Revoked - Now Ippc
AH	On site	Operator: Shell UK Ltd Address: Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR Process: Recovery Processes Permit Number: BZ1374	Original Permit Number: IPCMINVAR Date Approved: 2-12-2005 Effective Date: 28-12-2005 Status: Revoked - Now Ippc
CH	282m W	Operator: The Associated Ocel Co Ltd Address: PO Box 17, Oil Sites Road, South Wirral, L65 4HF Process: Combustion Processes Permit Number: BK7749	Original Permit Number: IPCMINVAR Date Approved: - Effective Date: - Status: Superseded
CH	282m W	Operator: The Associated Ocel Co Ltd Address: PO Box 17, Oil Sites Road, South Wirral, L65 4HF Process: Manufacture And Use Of Organic Chemicals Permit Number: BK7099	Original Permit Number: IPCMINVAR Date Approved: - Effective Date: - Status: Superseded
CH	282m W	Operator: The Associated Ocel Co Ltd Address: PO Box 17, Oil Sites Road, South Wirral, L65 4HF Process: Processes Involving Halogens Permit Number: BK7722	Original Permit Number: IPCMINVAR Date Approved: - Effective Date: - Status: Superseded
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Combustion Processes Permit Number: AA3611	Original Permit Number: IPCAPP Date Approved: 31-10-1991 Effective Date: 31-10-1991 Status: Superseded By Variation



ID	Location	Details	
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Coating Processes And Printing Permit Number: AH4713	Original Permit Number: IPCPART B - NEW APP Date Approved: 5-10-1993 Effective Date: 11-10-1993 Status: Revoked - Now Ippc
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Petrochemical Processes Permit Number: AJ6491	Original Permit Number: IPCAIRAPP Date Approved: 21-10-1993 Effective Date: 21-10-1993 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Manufacture And Use Of Organic Chemicals Permit Number: AK3919	Original Permit Number: IPCAIRAPP Date Approved: 26-1-1994 Effective Date: 7-2-1994 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Combustion Processes Permit Number: AL0966	Original Permit Number: IPCMINVAR Date Approved: 23-12-1993 Effective Date: 23-12-1993 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Processes Involving Halogens Permit Number: AL7529	Original Permit Number: IPCAIRAPP Date Approved: 30-8-1994 Effective Date: 1-9-1994 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Processes Involving Halogens Permit Number: AL7537	Original Permit Number: IPCAIRAPP Date Approved: 21-6-1994 Effective Date: 1-7-1994 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Manufacture And Use Of Organic Chemicals Permit Number: AN6256	Original Permit Number: IPCMINVAR Date Approved: 30-8-1994 Effective Date: 1-9-1994 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Combustion Processes Permit Number: AO8114	Original Permit Number: IPCMINVAR Date Approved: 15-12-1994 Effective Date: 1-1-1995 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Manufacture And Use Of Organic Chemicals Permit Number: AP8039	Original Permit Number: IPCMINVAR Date Approved: 2-2-1995 Effective Date: 8-2-1995 Status: Superseded By Variation



ID	Location	Details	
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Processes Involving Halogens Permit Number: AQ7771	Original Permit Number: IPCAPP Date Approved: 16-8-1995 Effective Date: 1-9-1995 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Non-ferrous Metals Permit Number: AS4176	Original Permit Number: IPCAIRAPP Date Approved: 15-12-1995 Effective Date: 1-1-1996 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Non-ferrous Metals Permit Number: AS4184	Original Permit Number: IPCAIRAPP Date Approved: 15-12-1995 Effective Date: 1-1-1996 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Non-ferrous Metals Permit Number: AW0709	Original Permit Number: IPCMINVAR Date Approved: 24-7-1996 Effective Date: 29-7-1996 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Manufacture And Use Of Organic Chemicals Permit Number: AX3916	Original Permit Number: IPCAPP Date Approved: 30-1-1997 Effective Date: 1-2-1997 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Processes Involving Halogens Permit Number: AY2052	Original Permit Number: IPCMINVAR Date Approved: 22-4-1997 Effective Date: 1-5-1997 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Processes Involving Halogens Permit Number: AZ4417	Original Permit Number: IPCMAJVAR Date Approved: 24-10-1997 Effective Date: 1-11-1997 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Manufacture And Use Of Organic Chemicals Permit Number: AZ7572	Original Permit Number: IPCMINVAR Date Approved: 25-9-1997 Effective Date: 1-10-1997 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Processes Involving Halogens Permit Number: BB8508	Original Permit Number: IPCMINVAR Date Approved: 16-5-2000 Effective Date: 19-5-2000 Status: Revoked - Now Ippc



ID	Location	Details	
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Processes Involving Halogens Permit Number: BC2092	Original Permit Number: IPCMINVAR Date Approved: 24-2-1999 Effective Date: 8-3-1999 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Petrochemical Processes Permit Number: BC6152	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Processes Involving Halogens Permit Number: BC7582	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Combustion Processes Permit Number: BD0273	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked - Now Ippc
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Non-ferrous Metals Permit Number: BD1962	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Non-ferrous Metals Permit Number: BD6433	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Manufacture And Use Of Organic Chemicals Permit Number: BD7995	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Processes Involving Halogens Permit Number: BD8916	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Processes Involving Halogens Permit Number: BE0627	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Superseded By Variation



ID	Location	Details	
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Manufacture And Use Of Organic Chemicals Permit Number: BE1267	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Processes Involving Halogens Permit Number: BI4217	Original Permit Number: IPCMINVAR Date Approved: 8-5-2000 Effective Date: 12-5-2000 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Processes Involving Halogens Permit Number: BI6317	Original Permit Number: IPCMINVAR Date Approved: 21-7-2000 Effective Date: 25-7-2000 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Manufacture And Use Of Organic Chemicals Permit Number: BJ2636	Original Permit Number: IPCMINVAR Date Approved: 18-9-2000 Effective Date: 20-9-2000 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Processes Involving Halogens Permit Number: BJ4051	Original Permit Number: IPCMINVAR Date Approved: 22-9-2000 Effective Date: 23-9-2000 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Processes Involving Halogens Permit Number: BK3891	Original Permit Number: IPCMINVAR Date Approved: 16-2-2001 Effective Date: 26-2-2001 Status: Revoked
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Manufacture And Use Of Organic Chemicals Permit Number: BK6009	Original Permit Number: IPCMINVAR Date Approved: 27-3-2001 Effective Date: 30-3-2001 Status: Revoked - Now Ippc
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Non-ferrous Metals Permit Number: BK7102	Original Permit Number: IPCMINVAR Date Approved: 17-7-2003 Effective Date: 21-7-2003 Status: Revoked - Now Ippc
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Processes Involving Halogens Permit Number: BK8010	Original Permit Number: IPCMINVAR Date Approved: 28-3-2001 Effective Date: 31-3-2001 Status: Superseded By Variation



ID	Location	Details	
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Manufacture And Use Of Organic Chemicals Permit Number: BU3981	Original Permit Number: IPCMINVAR Date Approved: 31-3-2003 Effective Date: 4-4-2003 Status: Superseded By Variation
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Manufacture And Use Of Organic Chemicals Permit Number: BU7529	Original Permit Number: IPCMINVAR Date Approved: 22-4-2003 Effective Date: 28-4-2003 Status: Revoked - Now Ippc
CH	282m W	Operator: Innospec Ltd Address: PO Box 17, Oil Sites Road, Ellesmere Port, South Wirral, CH65 4FR Process: Processes Involving Halogens Permit Number: BV0562	Original Permit Number: IPCMINVAR Date Approved: 14-7-2003 Effective Date: 15-7-2003 Status: Revoked - Now Ippc

This data is sourced from the Environment Agency and Natural Resources Wales.

4.11 Licensed industrial activities (Part A(1))

Records within 500m

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Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on [page 167 >](#)

ID	Location	Details	
A	On site	Operator: SHELL UK OIL PRODUCTS LIMITED Installation Name: STANLOW MP FIRETUBE BOILERS Process: COMBUSTION; ANY FUEL =>50MW Permit Number: BW0932IS Original Permit Number: BW0932IS	EPR Reference: EPR/BW0932IS Issue Date: 23/06/2004 Effective Date: 21/12/2007 Last date noted as effective: 07/01/2026 Status: Revoked
A	On site	Operator: SHELL UK OIL PRODUCTS LTD Installation Name: - Process: COMBUSTION; ANY FUEL =>50MW Permit Number: BW0932 Original Permit Number: BW0932	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 01/10/2004 Status: SUPERSEDED BY PAS
M	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: CRUDE OIL Permit Number: FP3506PQ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 27/01/2020 Effective Date: 27/01/2020 Last date noted as effective: 21/03/2023 Status: Superseded



ID	Location	Details	
M	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO- CHEMICAL TREATMENT Permit Number: FP3506PQ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 27/01/2020 Effective Date: 27/01/2020 Last date noted as effective: 21/03/2023 Status: Superseded
M	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: INORGANIC CHEMICALS; NON METALS ETC EG CALCIUM CARBIDE Permit Number: FP3506PQ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 27/01/2020 Effective Date: 27/01/2020 Last date noted as effective: 21/03/2023 Status: Superseded
M	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: ORGANIC CHEMICALS; HYDROCARBONS EG AROMATICS Permit Number: FP3506PQ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 27/01/2020 Effective Date: 27/01/2020 Last date noted as effective: 21/03/2023 Status: Superseded
M	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: REFINING MINERAL OILS Permit Number: FP3506PQ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 27/01/2020 Effective Date: 27/01/2020 Last date noted as effective: 21/03/2023 Status: Superseded
M	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: DISPOSAL OR RECOVERY OF HAZARDOUS WASTE WITH A CAPACITY EXCEEDING 10 TONNES PER DAY INVOLVING PHYSICO-CHEMICAL TREATMENT Permit Number: FP3506PQ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 27/01/2020 Effective Date: 27/01/2020 Last date noted as effective: 21/03/2023 Status: Superseded
M	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: INORGANIC CHEMICALS; USING HYDROGEN CYANIDE/SULPHIDE Permit Number: FP3506PQ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 27/01/2020 Effective Date: 27/01/2020 Last date noted as effective: 21/03/2023 Status: Superseded



ID	Location	Details	
M	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: COMBUSTION; ANY FUEL =>50MW Permit Number: FP3506PQ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 27/01/2020 Effective Date: 27/01/2020 Last date noted as effective: 21/03/2023 Status: Superseded
M	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: DISPOSAL OR RECOVERY OF HAZARDOUS WASTE WITH A CAPACITY EXCEEDING 10 TONNES PER DAY INVOLVING BIOLOGICAL TREATMENT Permit Number: FP3506PQ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 27/01/2020 Effective Date: 27/01/2020 Last date noted as effective: 21/03/2023 Status: Superseded
M	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: FP3506PQ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 27/01/2020 Effective Date: 27/01/2020 Last date noted as effective: 21/03/2023 Status: Superseded
Y	On site	Operator: ESSAR OIL (UK) LIMITED Installation Name: STANLOW MANUFACTURING COMPLEX Process: REFINING MINERAL OILS Permit Number: JP3530RD Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 03/03/2017 Effective Date: 03/03/2017 Last date noted as effective: 01/01/2018 Status: EFFECTIVE
Y	On site	Operator: ESSAR OIL (UK) LIMITED Installation Name: STANLOW MANUFACTURING COMPLEX Process: REFINING MINERAL OILS Permit Number: JP3530RD Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 03/03/2017 Effective Date: 03/03/2017 Last date noted as effective: 01/01/2018 Status: EFFECTIVE
AI	On site	Operator: SHELL UK OIL PRODUCTS LIMITED Installation Name: Stanlow Manufacturing Complex EPR/NP3237LS Process: INCINERATION OF HAZARDOUS WASTE Permit Number: NP3237LS Original Permit Number: NP3237LS	EPR Reference: EPR/NP3237LS Issue Date: 21/12/2007 Effective Date: 23/12/2008 Last date noted as effective: 07/01/2026 Status: Superseded
AI	On site	Operator: SHELL UK OIL PRODUCTS LIMITED Installation Name: Stanlow Manufacturing Complex EPR/NP3237LS Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: NP3237LS Original Permit Number: NP3237LS	EPR Reference: EPR/NP3237LS Issue Date: 21/12/2007 Effective Date: 23/12/2008 Last date noted as effective: 07/01/2026 Status: Superseded



ID	Location	Details	
AI	On site	Operator: SHELL UK OIL PRODUCTS LIMITED Installation Name: Stanlow Manufacturing Complex EPR/NP3237LS Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: NP3237LS Original Permit Number: NP3237LS	EPR Reference: EPR/NP3237LS Issue Date: 21/12/2007 Effective Date: 23/12/2008 Last date noted as effective: 07/01/2026 Status: Superseded
AI	On site	Operator: SHELL UK OIL PRODUCTS LIMITED Installation Name: Stanlow Manufacturing Complex EPR/NP3237LS Process: COMBUSTION; ANY FUEL =>50MW Permit Number: NP3237LS Original Permit Number: NP3237LS	EPR Reference: EPR/NP3237LS Issue Date: 21/12/2007 Effective Date: 23/12/2008 Last date noted as effective: 07/01/2026 Status: Superseded
AI	On site	Operator: SHELL UK OIL PRODUCTS LIMITED Installation Name: Stanlow Manufacturing Complex EPR/NP3237LS Process: INORGANIC CHEMICALS; USING HYDROGEN CYANIDE/SULPHIDE Permit Number: NP3237LS Original Permit Number: NP3237LS	EPR Reference: EPR/NP3237LS Issue Date: 21/12/2007 Effective Date: 23/12/2008 Last date noted as effective: 07/01/2026 Status: Superseded
AI	On site	Operator: SHELL UK OIL PRODUCTS LIMITED Installation Name: Stanlow Manufacturing Complex EPR/NP3237LS Process: ORGANIC CHEMICALS; SULPHUR CONTAINING COMPOUNDS EG SULPHIDES Permit Number: NP3237LS Original Permit Number: NP3237LS	EPR Reference: EPR/NP3237LS Issue Date: 21/12/2007 Effective Date: 23/12/2008 Last date noted as effective: 07/01/2026 Status: Superseded
AI	On site	Operator: SHELL UK OIL PRODUCTS LIMITED Installation Name: Stanlow Manufacturing Complex EPR/NP3237LS Process: REFINING MINERAL OILS Permit Number: NP3237LS Original Permit Number: NP3237LS	EPR Reference: EPR/NP3237LS Issue Date: 21/12/2007 Effective Date: 23/12/2008 Last date noted as effective: 07/01/2026 Status: Superseded
AI	On site	Operator: SHELL UK OIL PRODUCTS LIMITED Installation Name: Stanlow Manufacturing Complex EPR/NP3237LS Process: LOADING/STORAGE/TREATMENT ETC OF CRUDE OIL Permit Number: NP3237LS Original Permit Number: NP3237LS	EPR Reference: EPR/NP3237LS Issue Date: 21/12/2007 Effective Date: 23/12/2008 Last date noted as effective: 07/01/2026 Status: Superseded
AI	On site	Operator: ESSAR OIL (UK) LIMITED Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: COMBUSTION; ANY FUEL =>50MW Permit Number: FP3139FN Original Permit Number: FP3139FN	EPR Reference: EPR/FP3139FN Issue Date: 15/11/2022 Effective Date: 17/11/2022 Last date noted as effective: 29/10/2024 Status: Effective



ID	Location	Details	
AI	On site	Operator: ESSAR OIL (UK) LIMITED Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: FP3139FN Original Permit Number: FP3139FN	EPR Reference: EPR/FP3139FN Issue Date: 15/11/2022 Effective Date: 17/11/2022 Last date noted as effective: 29/10/2024 Status: Effective
AI	On site	Operator: ESSAR OIL (UK) LIMITED Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: INORGANIC CHEMICALS; USING HYDROGEN CYANIDE/SULPHIDE Permit Number: FP3139FN Original Permit Number: FP3139FN	EPR Reference: EPR/FP3139FN Issue Date: 15/11/2022 Effective Date: 17/11/2022 Last date noted as effective: 29/10/2024 Status: Effective
AI	On site	Operator: ESSAR OIL (UK) LIMITED Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: INCINERATION OF HAZARDOUS WASTE Permit Number: FP3139FN Original Permit Number: FP3139FN	EPR Reference: EPR/FP3139FN Issue Date: 15/11/2022 Effective Date: 17/11/2022 Last date noted as effective: 29/10/2024 Status: Effective
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: REFINING MINERAL OILS Permit Number: GP3207LV Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 15/11/2022 Effective Date: 17/11/2022 Last date noted as effective: 21/03/2023 Status: Effective
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: CRUDE OIL Permit Number: GP3207LV Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 15/11/2022 Effective Date: 17/11/2022 Last date noted as effective: 21/03/2023 Status: Effective
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: GP3207LV Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 15/11/2022 Effective Date: 17/11/2022 Last date noted as effective: 21/03/2023 Status: Effective
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: ORGANIC CHEMICALS; HYDROCARBONS EG AROMATICS Permit Number: GP3207LV Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 15/11/2022 Effective Date: 17/11/2022 Last date noted as effective: 21/03/2023 Status: Effective



ID	Location	Details	
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: INORGANIC CHEMICALS; USING HYDROGEN CYANIDE/SULPHIDE Permit Number: GP3207LV Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 15/11/2022 Effective Date: 17/11/2022 Last date noted as effective: 21/03/2023 Status: Effective
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: DISPOSAL OR RECOVERY OF HAZARDOUS WASTE WITH A CAPACITY EXCEEDING 10 TONNES PER DAY INVOLVING BIOLOGICAL TREATMENT Permit Number: GP3207LV Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 15/11/2022 Effective Date: 17/11/2022 Last date noted as effective: 21/03/2023 Status: Effective
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: COMBUSTION; ANY FUEL =>50MW Permit Number: GP3207LV Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 15/11/2022 Effective Date: 17/11/2022 Last date noted as effective: 21/03/2023 Status: Effective
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: INORGANIC CHEMICALS; NON METALS ETC EG CALCIUM CARBIDE Permit Number: GP3207LV Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 15/11/2022 Effective Date: 17/11/2022 Last date noted as effective: 21/03/2023 Status: Effective
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: DISPOSAL OR RECOVERY OF HAZARDOUS WASTE WITH A CAPACITY EXCEEDING 10 TONNES PER DAY INVOLVING PHYSICO-CHEMICAL TREATMENT Permit Number: GP3207LV Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 15/11/2022 Effective Date: 17/11/2022 Last date noted as effective: 21/03/2023 Status: Effective
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO- CHEMICAL TREATMENT Permit Number: GP3207LV Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 15/11/2022 Effective Date: 17/11/2022 Last date noted as effective: 21/03/2023 Status: Effective



ID	Location	Details	
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: REFINING MINERAL OILS Permit Number: DP3530CQ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 28/12/2012 Effective Date: 28/12/2012 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex Process: CRUDE OIL Permit Number: JP3530RD Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 03/03/2017 Effective Date: 03/03/2017 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: REFINING MINERAL OILS Permit Number: NP3030QZ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 26/09/2018 Effective Date: 26/09/2018 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: LOADING/STORAGE/TREATMENT ETC OF CRUDE OIL Permit Number: NP3030QZ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 26/09/2018 Effective Date: 26/09/2018 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: CRUDE OIL Permit Number: NP3030QZ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 26/09/2018 Effective Date: 26/09/2018 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: INCINERATION OF HAZARDOUS WASTE Permit Number: JP3737FS Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 27/01/2012 Effective Date: 27/01/2012 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: INCINERATION OF HAZARDOUS WASTE Permit Number: KP3638NF Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 31/03/2014 Effective Date: 31/03/2014 Last date noted as effective: 21/03/2023 Status: Superseded



ID	Location	Details	
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: COMBUSTION; ANY FUEL =>50MW Permit Number: NP3030QZ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 26/09/2018 Effective Date: 26/09/2018 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: REFINING MINERAL OILS Permit Number: NP3030QZ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 26/09/2018 Effective Date: 26/09/2018 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: PP3308MX Original Permit Number: FP3139FN	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 21/03/2023 Status: Determination
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: ORGANIC CHEMICALS; SULPHUR CONTAINING COMPOUNDS EG SULPHIDES Permit Number: DP3530CQ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 28/12/2012 Effective Date: 28/12/2012 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: INORGANIC CHEMICALS; USING HYDROGEN CYANIDE/SULPHIDE Permit Number: JP3737FS Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 27/01/2012 Effective Date: 27/01/2012 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: REFINING MINERAL OILS Permit Number: JP3737FS Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 27/01/2012 Effective Date: 27/01/2012 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: CRUDE OIL Permit Number: EP3404LC Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 12/05/2022 Effective Date: 12/05/2022 Last date noted as effective: 21/03/2023 Status: Effective



ID	Location	Details	
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: EP3404LC Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 12/05/2022 Effective Date: 12/05/2022 Last date noted as effective: 21/03/2023 Status: Effective
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO- CHEMICAL TREATMENT Permit Number: EP3404LC Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 12/05/2022 Effective Date: 12/05/2022 Last date noted as effective: 21/03/2023 Status: Effective
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: DISPOSAL OR RECOVERY OF HAZARDOUS WASTE WITH A CAPACITY EXCEEDING 10 TONNES PER DAY INVOLVING BIOLOGICAL TREATMENT Permit Number: EP3404LC Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 12/05/2022 Effective Date: 12/05/2022 Last date noted as effective: 21/03/2023 Status: Effective
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: INORGANIC CHEMICALS; NON METALS ETC EG CALCIUM CARBIDE Permit Number: EP3404LC Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 12/05/2022 Effective Date: 12/05/2022 Last date noted as effective: 21/03/2023 Status: Effective
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: THE INCINERATION OF HAZARDOUS WASTE IN AN INCINERATION OR CO-INCINERATION PLANT WITH A CAPACITY EXCEEDING 10 TONNES PER DAY Permit Number: EP3404LC Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 12/05/2022 Effective Date: 12/05/2022 Last date noted as effective: 21/03/2023 Status: Effective
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex Process: COMBUSTION; ANY FUEL =>50MW Permit Number: JP3530RD Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 03/03/2017 Effective Date: 03/03/2017 Last date noted as effective: 21/03/2023 Status: Superseded



ID	Location	Details	
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex Process: LOADING/STORAGE/TREATMENT ETC OF CRUDE OIL Permit Number: JP3530RD Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 03/03/2017 Effective Date: 03/03/2017 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: JP3530RD Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 03/03/2017 Effective Date: 03/03/2017 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: COMBUSTION; ANY FUEL =>50MW Permit Number: JP3737FS Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 27/01/2012 Effective Date: 27/01/2012 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: COMBUSTION; ANY FUEL =>50MW Permit Number: KP3638NF Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 31/03/2014 Effective Date: 31/03/2014 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: DP3530CQ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 28/12/2012 Effective Date: 28/12/2012 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: LOADING/STORAGE/TREATMENT ETC OF CRUDE OIL Permit Number: FP3139FN Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 01/08/2011 Effective Date: 01/08/2011 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: FP3139FN Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 01/08/2011 Effective Date: 01/08/2011 Last date noted as effective: 21/03/2023 Status: Superseded



ID	Location	Details	
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: KP3638NF Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 31/03/2014 Effective Date: 31/03/2014 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: REFINING MINERAL OILS Permit Number: KP3638NF Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 31/03/2014 Effective Date: 31/03/2014 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: COMBUSTION; ANY FUEL =>50MW Permit Number: KP3735VE Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 08/04/2014 Effective Date: 08/04/2014 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: INCINERATION OF HAZARDOUS WASTE Permit Number: KP3735VE Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 08/04/2014 Effective Date: 08/04/2014 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: INORGANIC CHEMICALS; USING HYDROGEN CYANIDE/SULPHIDE Permit Number: KP3735VE Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 08/04/2014 Effective Date: 08/04/2014 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex Process: REFINING MINERAL OILS Permit Number: JP3530RD Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 03/03/2017 Effective Date: 03/03/2017 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex Process: INCINERATION OF HAZARDOUS WASTE Permit Number: JP3530RD Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 03/03/2017 Effective Date: 03/03/2017 Last date noted as effective: 21/03/2023 Status: Superseded



ID	Location	Details	
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: COMBUSTION; ANY FUEL =>50MW Permit Number: EP3404LC Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 12/05/2022 Effective Date: 12/05/2022 Last date noted as effective: 21/03/2023 Status: Effective
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex Process: INORGANIC CHEMICALS; USING HYDROGEN CYANIDE/SULPHIDE Permit Number: JP3530RD Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 03/03/2017 Effective Date: 03/03/2017 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: INCINERATION OF HAZARDOUS WASTE Permit Number: NP3030QZ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 26/09/2018 Effective Date: 26/09/2018 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: INORGANIC CHEMICALS; USING HYDROGEN CYANIDE/SULPHIDE Permit Number: NP3030QZ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 26/09/2018 Effective Date: 26/09/2018 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: LOADING/STORAGE/TREATMENT ETC OF CRUDE OIL Permit Number: DP3530CQ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 28/12/2012 Effective Date: 28/12/2012 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: INCINERATION OF HAZARDOUS WASTE Permit Number: DP3530CQ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 28/12/2012 Effective Date: 28/12/2012 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: JP3737FS Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 27/01/2012 Effective Date: 27/01/2012 Last date noted as effective: 21/03/2023 Status: Superseded



ID	Location	Details	
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: CRUDE OIL Permit Number: PP3308MX Original Permit Number: FP3139FN	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 21/03/2023 Status: Determination
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO- CHEMICAL TREATMENT Permit Number: PP3308MX Original Permit Number: FP3139FN	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 21/03/2023 Status: Determination
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: ORGANIC CHEMICALS; SULPHUR CONTAINING COMPOUNDS EG SULPHIDES Permit Number: KP3638NF Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 31/03/2014 Effective Date: 31/03/2014 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: REFINING MINERAL OILS Permit Number: PP3308MX Original Permit Number: FP3139FN	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 21/03/2023 Status: Determination
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: COMBUSTION; ANY FUEL =>50MW Permit Number: DP3530CQ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 28/12/2012 Effective Date: 28/12/2012 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: ORGANIC CHEMICALS; SULPHUR CONTAINING COMPOUNDS EG SULPHIDES Permit Number: NP3030QZ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 26/09/2018 Effective Date: 26/09/2018 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: COMBUSTION; ANY FUEL =>50MW Permit Number: PP3308MX Original Permit Number: FP3139FN	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 21/03/2023 Status: Determination



ID	Location	Details	
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: DP3530CQ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 28/12/2012 Effective Date: 28/12/2012 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: ORGANIC CHEMICALS; SULPHUR CONTAINING COMPOUNDS EG SULPHIDES Permit Number: FP3139FN Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 01/08/2011 Effective Date: 01/08/2011 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: REFINING MINERAL OILS Permit Number: FP3139FN Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 01/08/2011 Effective Date: 01/08/2011 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: NP3030QZ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 26/09/2018 Effective Date: 26/09/2018 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: NP3030QZ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 26/09/2018 Effective Date: 26/09/2018 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: DISPOSAL OR RECOVERY OF HAZARDOUS WASTE WITH A CAPACITY EXCEEDING 10 TONNES PER DAY INVOLVING PHYSICO-CHEMICAL TREATMENT Permit Number: PP3308MX Original Permit Number: FP3139FN	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 21/03/2023 Status: Determination



ID	Location	Details	
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: COMBUSTION; ANY FUEL =>50MW Permit Number: KP3736FB Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 22/03/2012 Effective Date: 22/03/2012 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: KP3736FB Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 22/03/2012 Effective Date: 22/03/2012 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: LOADING/STORAGE/TREATMENT ETC OF CRUDE OIL Permit Number: KP3735VE Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 08/04/2014 Effective Date: 08/04/2014 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: LOADING/STORAGE/TREATMENT ETC OF CRUDE OIL Permit Number: KP3736FB Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 22/03/2012 Effective Date: 22/03/2012 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: REFINING MINERAL OILS Permit Number: KP3736FB Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 22/03/2012 Effective Date: 22/03/2012 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Shell Oil Products Ltd Installation Name: Stanlow Manufacturing Complex EPR/NP3237LS Process: COMBUSTION; ANY FUEL =>50MW Permit Number: UP3234GJ Original Permit Number: NP3237LS	EPR Reference: - Issue Date: 23/12/2008 Effective Date: 23/12/2008 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex Process: ORGANIC CHEMICALS; SULPHUR CONTAINING COMPOUNDS EG SULPHIDES Permit Number: JP3530RD Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 03/03/2017 Effective Date: 03/03/2017 Last date noted as effective: 21/03/2023 Status: Superseded



ID	Location	Details	
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: DISPOSAL OR RECOVERY OF HAZARDOUS WASTE WITH A CAPACITY EXCEEDING 10 TONNES PER DAY INVOLVING BIOLOGICAL TREATMENT Permit Number: PP3308MX Original Permit Number: FP3139FN	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 21/03/2023 Status: Determination
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: INORGANIC CHEMICALS; NON METALS ETC EG CALCIUM CARBIDE Permit Number: PP3308MX Original Permit Number: FP3139FN	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 21/03/2023 Status: Determination
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: INORGANIC CHEMICALS; USING HYDROGEN CYANIDE/SULPHIDE Permit Number: PP3308MX Original Permit Number: FP3139FN	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 21/03/2023 Status: Determination
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: ORGANIC CHEMICALS; HYDROCARBONS EG AROMATICS Permit Number: PP3308MX Original Permit Number: FP3139FN	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 21/03/2023 Status: Determination
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: INORGANIC CHEMICALS; USING HYDROGEN CYANIDE/SULPHIDE Permit Number: DP3530CQ Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 28/12/2012 Effective Date: 28/12/2012 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: LOADING/STORAGE/TREATMENT ETC OF CRUDE OIL Permit Number: JP3737FS Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 27/01/2012 Effective Date: 27/01/2012 Last date noted as effective: 21/03/2023 Status: Superseded



ID	Location	Details	
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: JP3737FS Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 27/01/2012 Effective Date: 27/01/2012 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: KP3638NF Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 31/03/2014 Effective Date: 31/03/2014 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: KP3735VE Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 08/04/2014 Effective Date: 08/04/2014 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: ORGANIC CHEMICALS; SULPHUR CONTAINING COMPOUNDS EG SULPHIDES Permit Number: KP3735VE Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 08/04/2014 Effective Date: 08/04/2014 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: INCINERATION OF HAZARDOUS WASTE Permit Number: KP3736FB Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 22/03/2012 Effective Date: 22/03/2012 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: INORGANIC CHEMICALS; USING HYDROGEN CYANIDE/SULPHIDE Permit Number: KP3736FB Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 22/03/2012 Effective Date: 22/03/2012 Last date noted as effective: 21/03/2023 Status: Superseded



ID	Location	Details	
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: KP3736FB Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 22/03/2012 Effective Date: 22/03/2012 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: REFINING MINERAL OILS Permit Number: KP3735VE Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 08/04/2014 Effective Date: 08/04/2014 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Shell Oil Products Ltd Installation Name: Stanlow Manufacturing Complex EPR/NP3237LS Process: INORGANIC CHEMICALS; USING HYDROGEN CYANIDE/SULPHIDE Permit Number: UP3234GJ Original Permit Number: NP3237LS	EPR Reference: - Issue Date: 23/12/2008 Effective Date: 23/12/2008 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Shell Oil Products Ltd Installation Name: Stanlow Manufacturing Complex EPR/NP3237LS Process: LOADING/STORAGE/TREATMENT ETC OF CRUDE OIL Permit Number: UP3234GJ Original Permit Number: NP3237LS	EPR Reference: - Issue Date: 23/12/2008 Effective Date: 23/12/2008 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Shell Oil Products Ltd Installation Name: Stanlow Manufacturing Complex EPR/NP3237LS Process: ORGANIC CHEMICALS; SULPHUR CONTAINING COMPOUNDS EG SULPHIDES Permit Number: UP3234GJ Original Permit Number: NP3237LS	EPR Reference: - Issue Date: 23/12/2008 Effective Date: 23/12/2008 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: DISPOSAL OR RECOVERY OF HAZARDOUS WASTE WITH A CAPACITY EXCEEDING 10 TONNES PER DAY INVOLVING PHYSICO-CHEMICAL TREATMENT Permit Number: EP3404LC Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 12/05/2022 Effective Date: 12/05/2022 Last date noted as effective: 21/03/2023 Status: Effective



ID	Location	Details	
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: ORGANIC CHEMICALS; HYDROCARBONS EG AROMATICS Permit Number: EP3404LC Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 12/05/2022 Effective Date: 12/05/2022 Last date noted as effective: 21/03/2023 Status: Effective
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: REFINING MINERAL OILS Permit Number: EP3404LC Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 12/05/2022 Effective Date: 12/05/2022 Last date noted as effective: 21/03/2023 Status: Effective
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: JP3530RD Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 03/03/2017 Effective Date: 03/03/2017 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil (UK) Limited Installation Name: Stanlow Manufacturing Complex Process: REFINING MINERAL OILS Permit Number: JP3530RD Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 03/03/2017 Effective Date: 03/03/2017 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: LOADING/STORAGE/TREATMENT ETC OF CRUDE OIL Permit Number: KP3638NF Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 31/03/2014 Effective Date: 31/03/2014 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Shell Oil Products Ltd Installation Name: Stanlow Manufacturing Complex EPR/NP3237LS Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: UP3234GJ Original Permit Number: NP3237LS	EPR Reference: - Issue Date: 23/12/2008 Effective Date: 23/12/2008 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Shell Oil Products Ltd Installation Name: Stanlow Manufacturing Complex EPR/NP3237LS Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: UP3234GJ Original Permit Number: NP3237LS	EPR Reference: - Issue Date: 23/12/2008 Effective Date: 23/12/2008 Last date noted as effective: 21/03/2023 Status: Superseded



ID	Location	Details	
AI	On site	Operator: Shell Oil Products Ltd Installation Name: Stanlow Manufacturing Complex EPR/NP3237LS Process: REFINING MINERAL OILS Permit Number: UP3234GJ Original Permit Number: NP3237LS	EPR Reference: - Issue Date: 23/12/2008 Effective Date: 23/12/2008 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: ORGANIC CHEMICALS; SULPHUR CONTAINING COMPOUNDS EG SULPHIDES Permit Number: JP3737FS Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 27/01/2012 Effective Date: 27/01/2012 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: KP3735VE Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 08/04/2014 Effective Date: 08/04/2014 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: ORGANIC CHEMICALS; SULPHUR CONTAINING COMPOUNDS EG SULPHIDES Permit Number: KP3736FB Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 22/03/2012 Effective Date: 22/03/2012 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Shell Oil Products Ltd Installation Name: Stanlow Manufacturing Complex EPR/NP3237LS Process: INCINERATION OF HAZARDOUS WASTE Permit Number: UP3234GJ Original Permit Number: NP3237LS	EPR Reference: - Issue Date: 23/12/2008 Effective Date: 23/12/2008 Last date noted as effective: 21/03/2023 Status: Superseded
AI	On site	Operator: Essar Oil UK Ltd Installation Name: Stanlow Manufacturing Complex EPR/FP3139FN Process: INORGANIC CHEMICALS; USING HYDROGEN CYANIDE/SULPHIDE Permit Number: KP3638NF Original Permit Number: FP3139FN	EPR Reference: - Issue Date: 31/03/2014 Effective Date: 31/03/2014 Last date noted as effective: 21/03/2023 Status: Superseded
BO	128m N	Operator: Argent Energy Limited Installation Name: Argent Biodiesel Stanlow Plant Process: MCP Permit Number: LP3233DK Original Permit Number: LP3233DK	EPR Reference: EPR/LP3233DK Issue Date: 18/10/2016 Effective Date: 18/11/2024 Last date noted as effective: 07/01/2026 Status: Effective



ID	Location	Details	
BO	128m N	Operator: Argent Energy Limited Installation Name: Argent Biodiesel Stanlow Plant Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: LP3233DK Original Permit Number: LP3233DK	EPR Reference: EPR/LP3233DK Issue Date: 18/10/2016 Effective Date: 18/11/2024 Last date noted as effective: 07/01/2026 Status: Effective
BO	128m N	Operator: Argent Energy Limited Installation Name: Argent Biodiesel Stanlow Plant Process: MCP Permit Number: LP3233DK Original Permit Number: LP3233DK	EPR Reference: EPR/LP3233DK Issue Date: 18/10/2016 Effective Date: 18/11/2024 Last date noted as effective: 07/01/2026 Status: Effective
BO	128m N	Operator: Argent Energy Limited Installation Name: Argent Biodiesel Stanlow Plant Process: MCP Permit Number: LP3233DK Original Permit Number: LP3233DK	EPR Reference: EPR/LP3233DK Issue Date: 18/10/2016 Effective Date: 18/11/2024 Last date noted as effective: 07/01/2026 Status: Effective
BO	128m N	Operator: Argent Energy Limited Installation Name: Argent Biodiesel Stanlow Plant Process: MCP Permit Number: LP3233DK Original Permit Number: LP3233DK	EPR Reference: EPR/LP3233DK Issue Date: 18/10/2016 Effective Date: 18/11/2024 Last date noted as effective: 07/01/2026 Status: Effective
BO	128m N	Operator: Argent Energy Limited Installation Name: Argent Biodiesel Stanlow Plant Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: LP3233DK Original Permit Number: LP3233DK	EPR Reference: EPR/LP3233DK Issue Date: 18/10/2016 Effective Date: 18/11/2024 Last date noted as effective: 07/01/2026 Status: Effective
BO	128m N	Operator: Argent Energy Limited Installation Name: Argent Biodiesel Stanlow Plant Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: LP3233DK Original Permit Number: LP3233DK	EPR Reference: EPR/LP3233DK Issue Date: 18/10/2016 Effective Date: 18/11/2024 Last date noted as effective: 07/01/2026 Status: Effective
BO	128m N	Operator: Argent Energy Limited Installation Name: Argent Biodiesel Stanlow Plant Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: LP3233DK Original Permit Number: LP3233DK	EPR Reference: EPR/LP3233DK Issue Date: 18/10/2016 Effective Date: 18/11/2024 Last date noted as effective: 07/01/2026 Status: Effective
BO	128m N	Operator: Argent Energy Limited Installation Name: Argent Biodiesel Stanlow Plant Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: LP3233DK Original Permit Number: LP3233DK	EPR Reference: EPR/LP3233DK Issue Date: 18/10/2016 Effective Date: 18/11/2024 Last date noted as effective: 07/01/2026 Status: Effective



ID	Location	Details	
BO	128m N	Operator: Argent Energy Limited Installation Name: Argent Biodiesel Stanlow Plant Process: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO-CHEMICAL TREATMENT Permit Number: LP3233DK Original Permit Number: LP3233DK	EPR Reference: EPR/LP3233DK Issue Date: 18/10/2016 Effective Date: 18/11/2024 Last date noted as effective: 07/01/2026 Status: Effective
BO	128m N	Operator: Argent Energy Limited Installation Name: Argent Biodiesel Stanlow Plant Process: MCP Permit Number: LP3233DK Original Permit Number: LP3233DK	EPR Reference: EPR/LP3233DK Issue Date: 18/10/2016 Effective Date: 18/11/2024 Last date noted as effective: 07/01/2026 Status: Effective
BO	128m N	Operator: Argent Energy (UK) Limited Installation Name: Stanlow Biodiesel Plant EPR/LP3233DK Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: GP3301LX Original Permit Number: LP3233DK	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 21/03/2023 Status: Determination
BO	128m N	Operator: Argent Energy (UK) Limited Installation Name: Argent Biodiesel Stanlow Plant - EPR/LP3233DK Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: JP3535JJ Original Permit Number: LP3233DK	EPR Reference: - Issue Date: 05/01/2018 Effective Date: 05/01/2018 Last date noted as effective: 21/03/2023 Status: Superseded
BO	128m N	Operator: Argent Energy Limited Installation Name: Stanlow Biodiesel Plant EPR/LP3233DK Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: LP3233DK Original Permit Number: LP3233DK	EPR Reference: EPR/LP3233DK Issue Date: 14/05/2021 Effective Date: 10/09/2024 Last date noted as effective: 29/10/2024 Status: Effective
BO	128m N	Operator: Argent Energy Limited Installation Name: Stanlow Biodiesel Plant EPR/LP3233DK Process: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO-CHEMICAL TREATMENT Permit Number: LP3233DK Original Permit Number: LP3233DK	EPR Reference: EPR/LP3233DK Issue Date: 14/05/2021 Effective Date: 10/09/2024 Last date noted as effective: 29/10/2024 Status: Effective



ID	Location	Details	
BO	128m N	Operator: Argent Energy (UK) Limited Installation Name: Argent Biodiesel Stanlow Plant - EPR/LP3233DK Process: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO-CHEMICAL TREATMENT Permit Number: JP3900LR Original Permit Number: LP3233DK	EPR Reference: - Issue Date: 14/05/2021 Effective Date: 14/05/2021 Last date noted as effective: 21/03/2023 Status: Effective
BO	128m N	Operator: Argent Energy (UK) Limited Installation Name: Argent Biodiesel Stanlow Plant - EPR/LP3233DK Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: PP3739QQ Original Permit Number: LP3233DK	EPR Reference: - Issue Date: 29/01/2021 Effective Date: 29/01/2021 Last date noted as effective: 21/03/2023 Status: Superseded
BO	128m N	Operator: Argent Energy (UK) Limited Installation Name: Stanlow Biodiesel Plant EPR/LP3233DK Process: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO-CHEMICAL TREATMENT Permit Number: GP3301LX Original Permit Number: LP3233DK	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 21/03/2023 Status: Determination
BO	128m N	Operator: Argent Energy (UK) Limited Installation Name: Argent Biodiesel Stanlow Plant - EPR/LP3233DK Process: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO-CHEMICAL TREATMENT Permit Number: JP3535JJ Original Permit Number: LP3233DK	EPR Reference: - Issue Date: 05/01/2018 Effective Date: 05/01/2018 Last date noted as effective: 21/03/2023 Status: Superseded
BO	128m N	Operator: Argent Energy (UK) Limited Installation Name: Argent Biodiesel Stanlow Plant - EPR/LP3233DK Process: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO-CHEMICAL TREATMENT Permit Number: PP3739QQ Original Permit Number: LP3233DK	EPR Reference: - Issue Date: 29/01/2021 Effective Date: 29/01/2021 Last date noted as effective: 21/03/2023 Status: Superseded
BO	128m N	Operator: Argent Energy (UK) Limited Installation Name: Argent Biodiesel Stanlow Plant Process: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO-CHEMICAL TREATMENT Permit Number: QP3433YN Original Permit Number: LP3233DK	EPR Reference: - Issue Date: 27/07/2017 Effective Date: 27/07/2017 Last date noted as effective: 21/03/2023 Status: Superseded



ID	Location	Details	
BO	128m N	Operator: Argent Energy (UK) Limited Installation Name: Argent Biodiesel Stanlow Plant - EPR/LP3233DK Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: YP3700SZ Original Permit Number: LP3233DK	EPR Reference: - Issue Date: 12/02/2021 Effective Date: 12/02/2021 Last date noted as effective: 21/03/2023 Status: Superseded
BO	128m N	Operator: Argent Energy (UK) Limited Installation Name: Argent Biodiesel Stanlow Plant - EPR/LP3233DK Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: JP3900LR Original Permit Number: LP3233DK	EPR Reference: - Issue Date: 14/05/2021 Effective Date: 14/05/2021 Last date noted as effective: 21/03/2023 Status: Effective
BO	128m N	Operator: Argent Energy (UK) Limited Installation Name: Argent Biodiesel Stanlow Plant Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: QP3433YN Original Permit Number: LP3233DK	EPR Reference: - Issue Date: 27/07/2017 Effective Date: 27/07/2017 Last date noted as effective: 21/03/2023 Status: Superseded
BO	128m N	Operator: Argent Energy (UK) Limited Installation Name: Argent Biodiesel Stanlow Plant - EPR/LP3233DK Process: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO-CHEMICAL TREATMENT Permit Number: YP3700SZ Original Permit Number: LP3233DK	EPR Reference: - Issue Date: 12/02/2021 Effective Date: 12/02/2021 Last date noted as effective: 21/03/2023 Status: Superseded

This data is sourced from the Environment Agency and Natural Resources Wales.

4.12 Licensed pollutant release (Part A(2)/B)

Records within 500m

4

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on [page 167 >](#)

ID	Location	Address	Details	
BE	67m NW	Shell Bitumen, Stanlow Refinery, Gate No.3, Oil Sites Road, Ellesmere Port, Cheshire, CH65 4HB	Process: Bitumen and Tar Processes Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No enforcements notified Comment: No enforcements notified



ID	Location	Address	Details	
CF	269m SE	Elton Green Services, Shotwick-Frosham Road, Elton Green, Elton, CH2 4LD	Process: Unloading of Petrol into Storage at Service Stations Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No enforcements notified Comment: No enforcements notified
CQ	406m NW	Shell Terminal, Stanlow Terminal, Gate No. 2, PO Box 12, Oil Sites Road, Ellesmere Port, Cheshire, CH65 4BD	Process: Unloading of Petrol into Storage at Service Stations Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No enforcements notified Comment: No enforcements notified
CQ	442m NW	Van Leer Merseyside Wks, Oil Sites Rd, Ellesmere Port, Merseyside, Cheshire, CH65 4EZ	Process: Coating Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No enforcements notified Comment: No enforcements notified

This data is sourced from Local Authority records.

4.13 Radioactive Substance Authorisations

Records within 500m

4

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

Features are displayed on the Current industrial land use map on [page 167 >](#)

ID	Location	Address	Details	
29	On site	TBE004, Beeston Building, Thornton Science Park, Pool Lane, Chester, CH2 4NU	Operator: MDECON Limited Type: - Permission number: AB3998DQ Date of approval: -	Effective from: - Last date of update: 01/01/2020 Status: Surrendered
G	On site	Shell Research Ltd, Thornton Research Centre, Ince, Chester, Cheshire, CH1 3SH	Operator: Shell Research Ltd Type: - Permission number: AC3060 Date of approval: 31/03/1991	Effective from: 31/03/1991 Last date of update: 01/01/2015 Status: Revoked/cancelled
G	On site	Shell Research Ltd, Thornton Research Centre, Ince, Chester, Cheshire, CH1 3SH	Operator: Shell Research Ltd Type: - Permission number: AC3078 Date of approval: 31/03/1991	Effective from: 31/03/1991 Last date of update: 01/01/2015 Status: Revoked/cancelled
AH	On site	Shell Uk Ltd, Stanlow Manufacturing Complex, Ellesmere Port, South Wirral, Merseyside, CH65 4FR	Operator: Shell Uk Ltd Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AC3116 Date of approval: 31/03/1991	Effective from: 31/03/1991 Last date of update: 01/01/2015 Status: Revoked/cancelled



This data is sourced from the Environment Agency and Natural Resources Wales.

4.14 Licensed Discharges to controlled waters

Records within 500m	72
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Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

Features are displayed on the Current industrial land use map on [page 167 >](#)

ID	Location	Address	Details	
30	On site	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 016890143 Permit Version: 1 Receiving Water: GALE BROOK	Status: SURRENDERED UNDER EPR 2010 Issue date: - Effective Date: 01/04/1980 Revocation Date: 01/04/2011
L	On site	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: 016890884 Permit Version: 1 Receiving Water: GALE BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 03/08/1993 Revocation Date: 03/08/1993
M	On site	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890212 Permit Version: 1 Receiving Water: GALE BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 06/11/1980 Revocation Date: 30/09/1985
M	On site	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 01AJ5720 Permit Version: 1 Receiving Water: GALE BROOK	Status: REVOKED AND REPLACED BY IPC AUTHORISATION Issue date: - Effective Date: 17/03/1994 Revocation Date: 17/03/1994
M	On site	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890212 Permit Version: 2 Receiving Water: GALE BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/10/1985 Revocation Date: 17/03/1994
AJ	On site	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890152 Permit Version: 4 Receiving Water: GALE BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 22/07/1991 Revocation Date: 05/12/1991



ID	Location	Address	Details	
AJ	On site	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890152 Permit Version: 7 Receiving Water: GALE BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 18/11/1993 Revocation Date: 19/01/1995
AJ	On site	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890152 Permit Version: 5 Receiving Water: GALE BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 06/12/1991 Revocation Date: 05/12/1992
AJ	On site	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890152 Permit Version: 1 Receiving Water: GALE BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/04/1980 Revocation Date: 31/05/1983
AJ	On site	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890152 Permit Version: 3 Receiving Water: GALE BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 24/06/1987 Revocation Date: 21/07/1991
AJ	On site	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890152 Permit Version: 2 Receiving Water: GALE BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/06/1983 Revocation Date: 23/06/1987
AJ	On site	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890152 Permit Version: 6 Receiving Water: GALE BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 06/12/1992 Revocation Date: 17/11/1993
AK	On site	THORNTON RESEARCH LABORATORIES, PO BOX 1, CHESTER, CHESHIRE	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890139 Permit Version: 1 Receiving Water: GALE BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/04/1980 Revocation Date: 31/10/1981



ID	Location	Address	Details	
AK	On site	THORNTON RESEARCH LABORATORIES, PO BOX 1, CHESTER, CHESHIRE	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890139 Permit Version: 2 Receiving Water: GALE BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/11/1981 Revocation Date: 31/05/1983
AK	On site	THORNTON RESEARCH LABORATORIES, PO BOX 1, CHESTER, CHESHIRE	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890139 Permit Version: 3 Receiving Water: GALE BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/06/1983 Revocation Date: 30/10/1995
AK	On site	THORNTON RESEARCH LABORATORIES, PO BOX 1, CHESTER, CHESHIRE	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890139 Permit Version: 4 Receiving Water: GALE BROOK	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: - Effective Date: 31/10/1995 Revocation Date: -
AL	On site	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890150 Permit Version: 4 Receiving Water: GALE BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 10/08/1993 Revocation Date: 31/07/1995
AL	On site	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890150 Permit Version: 2 Receiving Water: GALE BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 25/07/1988 Revocation Date: 05/12/1991
AL	On site	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890150 Permit Version: 3 Receiving Water: GALE BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 06/12/1991 Revocation Date: 09/08/1993
AL	On site	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890150 Permit Version: 1 Receiving Water: GALE BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/04/1980 Revocation Date: 24/07/1988



ID	Location	Address	Details	
BK	96m SW	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890860 Permit Version: 2 Receiving Water: RIVER GOWY	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: - Effective Date: 10/08/1995 Revocation Date: 28/11/2008
BK	96m SW	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890860 Permit Version: 1 Receiving Water: RIVER GOWY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 18/01/1988 Revocation Date: 09/08/1995
BF	116m NW	AIR PRODUCTS LTD, OIL SITES RD, STANLOW, ELLESMERE PORT, CHESHIRE	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890158 Permit Version: 2 Receiving Water: RIVER GOWY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 13/01/1993 Revocation Date: 12/01/1994
BF	116m NW	AIR PRODUCTS LTD, OIL SITES RD, STANLOW, ELLESMERE PORT, CHESHIRE	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890158 Permit Version: 3 Receiving Water: RIVER GOWY	Status: REVOKED - DISCHARGE CEASED (WATER ACT 1989 SCHED 12 & 6) Issue date: - Effective Date: 13/01/1994 Revocation Date: 20/08/2003
BF	116m NW	AIR PRODUCTS LTD, OIL SITES RD, STANLOW, ELLESMERE PORT, CHESHIRE	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890158 Permit Version: 1 Receiving Water: RIVER GOWY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/05/1980 Revocation Date: 12/01/1993
BV	174m W	SHELL (UK) LTD, DISTRIBUTION DEPOT, OIL SITES RD, STANLOW, ELLESMERE PORT, CHESHIRE	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016891569 Permit Version: 1 Receiving Water: RIVER GOWY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 23/01/1990 Revocation Date: 19/04/1995
60	184m SE	ELTON GREEN, NR ELLESMERE PORT, CHESHIRE	Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Permit Number: 016880990 Permit Version: 3 Receiving Water: VIA HIGHWAY DRAIN TO R. GOWY	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 28/10/2004 Effective Date: 28/10/2004 Revocation Date: -



ID	Location	Address	Details	
CB	230m SE	ELTON GREEN, NR ELLESMERE PORT, CHESHIRE	Effluent Type: MISCELLANEOUS DISCHARGES - EMERGENCY DISCHARGES Permit Number: 016880990 Permit Version: 1 Receiving Water: TO HIGHWAY DRAIN	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/01/1900 Revocation Date: 11/09/1989
CB	230m SE	ELTON GREEN, NR ELLESMERE PORT, CHESHIRE	Effluent Type: MISCELLANEOUS DISCHARGES - EMERGENCY DISCHARGES Permit Number: 016880990 Permit Version: 2 Receiving Water: TO HIGHWAY DRAIN	Status: CONSENT REVOKED OR REVISED - NEW CONSENT ISSUED (37(1)) Issue date: - Effective Date: 12/09/1989 Revocation Date: 27/10/2004
CB	230m SE	ELTON GREEN, NR ELLESMERE PORT, CHESHIRE	Effluent Type: MISCELLANEOUS DISCHARGES - EMERGENCY DISCHARGES Permit Number: 01CHE0004 Permit Version: 1 Receiving Water: HIGHWAY DRAIN(A5117)	Status: CONSENT REVOKED OR REVISED - NEW CONSENT ISSUED (37(1)) Issue date: - Effective Date: 01/01/1995 Revocation Date: 01/01/1995
CI	298m NW	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE (CONTAM SURFACE WATER, NOT WASTE SIT Permit Number: 016890474 Permit Version: 1 Receiving Water: RIVER GOWY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 24/06/1987 Revocation Date: 24/07/1988
CI	298m NW	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE (CONTAM SURFACE WATER, NOT WASTE SIT Permit Number: 016890474 Permit Version: 2 Receiving Water: RIVER GOWY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 25/07/1988 Revocation Date: 30/04/1994
75	300m S	THORNTON MANOR NURSING HOME, THORNTON LANE, THORNTON-LE-MOOR, CHESHIRE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 016891578 Permit Version: 2 Receiving Water: WATERCOURSE	Status: LAPSED UNDER SCHEDULE 23 ENVIRONMENT ACT 1995 Issue date: - Effective Date: 18/04/1994 Revocation Date: 01/10/1995
76	308m S	BURMAH CASTROL LTD, STANLOW, ELLESMERE PORT, CHESHIRE	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890004 Permit Version: 1 Receiving Water: RIVER GOWY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/01/1900 Revocation Date: 14/03/1988



ID	Location	Address	Details	
CJ	314m S	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE (CONTAM SURFACE WATER, NOT WASTE SIT Permit Number: 016890144 Permit Version: 2 Receiving Water: THORNTON BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/06/1983 Revocation Date: 24/07/1988
CJ	314m S	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE (CONTAM SURFACE WATER, NOT WASTE SIT Permit Number: 016890144 Permit Version: 3 Receiving Water: THORNTON BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 25/07/1988 Revocation Date: 05/12/1991
CJ	314m S	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE (CONTAM SURFACE WATER, NOT WASTE SIT Permit Number: 016890144 Permit Version: 1 Receiving Water: THORNTON BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/04/1980 Revocation Date: 31/05/1983
CJ	314m S	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE (CONTAM SURFACE WATER, NOT WASTE SIT Permit Number: 016890144 Permit Version: 4 Receiving Water: THORNTON BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 06/12/1991 Revocation Date: 06/12/1993
CK	343m W	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890940 Permit Version: 1 Receiving Water: THORNTON BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 19/05/1989 Revocation Date: 30/01/1991
CK	343m W	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890940 Permit Version: 2 Receiving Water: THORNTON BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 31/01/1991 Revocation Date: 26/08/1991



ID	Location	Address	Details	
CL	351m SW	BURMAH CASTROL LTD, STANLOW, ELLESMERE PORT, CHESHIRE	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: 016890005 Permit Version: 1 Receiving Water: RIVER GOWY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/09/1979 Revocation Date: 22/04/1991
CN	353m NW	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890469 Permit Version: 1 Receiving Water: RIVER GOWY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 25/07/1988 Revocation Date: 05/12/1991
CN	353m NW	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890469 Permit Version: 2 Receiving Water: RIVER GOWY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 06/12/1991 Revocation Date: 31/12/1993
CL	353m SW	BURMAH CASTROL LTD, STANLOW, ELLESMERE PORT, CHESHIRE	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890006 Permit Version: 1 Receiving Water: RIVER GOWY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/01/1900 Revocation Date: 14/03/1988
CN	366m NW	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890470 Permit Version: 1 Receiving Water: RIVER GOWY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 25/07/1988 Revocation Date: 05/12/1991
CN	366m NW	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890470 Permit Version: 2 Receiving Water: RIVER GOWY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 06/12/1991 Revocation Date: 28/07/1997
CN	366m NW	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890470 Permit Version: 4 Receiving Water: RIVER GOWY	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: - Effective Date: 01/04/1998 Revocation Date: 13/06/1999



ID	Location	Address	Details	
CN	366m NW	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890470 Permit Version: 5 Receiving Water: RIVER GOWY	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 25/09/2001 Effective Date: 14/06/1999 Revocation Date: 28/11/2008
CN	366m NW	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890470 Permit Version: 3 Receiving Water: RIVER GOWY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 29/07/1997 Revocation Date: 31/03/1998
CN	366m NW	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: 01AF8394 Permit Version: 1 Receiving Water: -	Status: REVOKED AND REPLACED BY IPC AUTHORISATION Issue date: - Effective Date: 01/01/1995 Revocation Date: 01/01/1995
CN	370m NW	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016891875 Permit Version: 1 Receiving Water: RIVER GOWY	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: - Effective Date: 09/10/1996 Revocation Date: 28/11/2008
CN	370m NW	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890468 Permit Version: 1 Receiving Water: RIVER GOWY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 12/09/1984 Revocation Date: 31/12/1993
CP	402m W	BURMAH CASTROL LTD, STANLOW, ELLESMERE PORT, CHESHIRE	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890002 Permit Version: 1 Receiving Water: RIVER GOWY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/09/1979 Revocation Date: 09/12/1987
CP	402m W	BURMAH CASTROL LTD, STANLOW, ELLESMERE PORT, CHESHIRE	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890002 Permit Version: 1 Receiving Water: RIVER GOWY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/09/1979 Revocation Date: 09/12/1987



ID	Location	Address	Details	
CP	402m W	BURMAH CASTROL LTD, STANLOW, ELLESMERE PORT, CHESHIRE	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890002 Permit Version: 2 Receiving Water: RIVER GOWY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 10/12/1987 Revocation Date: 30/06/1992
CP	402m W	BURMAH CASTROL LTD, STANLOW, ELLESMERE PORT, CHESHIRE	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890002 Permit Version: 2 Receiving Water: RIVER GOWY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 10/12/1987 Revocation Date: 30/06/1992
CP	402m W	BURMAH CASTROL LTD, STANLOW, ELLESMERE PORT, CHESHIRE	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890002 Permit Version: 3 Receiving Water: RIVER GOWY	Status: LAPSED UNDER SCHEDULE 23 ENVIRONMENT ACT 1995 Issue date: - Effective Date: 01/07/1992 Revocation Date: 10/09/2002
CN	402m NW	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE (CONTAM SURFACE WATER, NOT WASTE SIT Permit Number: 016890235 Permit Version: 3 Receiving Water: RIVER GOWY (TIDAL)	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 25/07/1988 Revocation Date: 13/02/1991
CN	402m NW	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: 016890235 Permit Version: 3 Receiving Water: RIVER GOWY (TIDAL)	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 25/07/1988 Revocation Date: 13/02/1991
CN	402m NW	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE (CONTAM SURFACE WATER, NOT WASTE SIT Permit Number: 016890203 Permit Version: 1 Receiving Water: RIVER GOWY (TIDAL)	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 22/07/1980 Revocation Date: 13/02/1991
CN	402m NW	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE (CONTAM SURFACE WATER, NOT WASTE SIT Permit Number: 016890235 Permit Version: 2 Receiving Water: RIVER GOWY (TIDAL)	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/12/1983 Revocation Date: 24/07/1988



ID	Location	Address	Details	
CN	402m NW	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: 016890235 Permit Version: 1 Receiving Water: RIVER GOWY (TIDAL)	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 21/04/1980 Revocation Date: 30/11/1983
CN	402m NW	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: 016890235 Permit Version: 2 Receiving Water: RIVER GOWY (TIDAL)	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/12/1983 Revocation Date: 24/07/1988
CN	402m NW	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE (CONTAM SURFACE WATER, NOT WASTE SIT Permit Number: 016890235 Permit Version: 1 Receiving Water: RIVER GOWY (TIDAL)	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 21/04/1980 Revocation Date: 30/11/1983
CS	445m W	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE (CONTAM SURFACE WATER, NOT WASTE SIT Permit Number: 016890952 Permit Version: 2 Receiving Water: THORNTON BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 06/12/1991 Revocation Date: 06/12/1993
CS	445m W	STANLOW REFINERY, SHELL (UK) LTD, STANLOW, ELLESMERE PORT, CHESHIRE, L65 4HB	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE (CONTAM SURFACE WATER, NOT WASTE SIT Permit Number: 016890952 Permit Version: 1 Receiving Water: THORNTON BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 23/06/1989 Revocation Date: 05/12/1991
CT	447m S	THORNTON-LE-MOORS WW NTWK PS 11004, S/O NO. 8 PARK ROAD, THORNTON-LE-MOORS, CHESTER, CHESHIRE, CH2 4JH	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01CHE0003 Permit Version: 2 Receiving Water: UNNAMED TRIB OF THORNTON BROOK	Status: VARIED UNDER EPR 2010 Issue date: 03/09/2010 Effective Date: 03/09/2010 Revocation Date: 09/06/2016



ID	Location	Address	Details	
CT	447m S	THORNTON-LE-MOORS WW NTWK PS 11004, S/O NO. 8 PARK ROAD, THORNTON-LE-MOORS, CHESTER, CHESHIRE, CH2 4JH	Effluent Type: MISCELLANEOUS DISCHARGES - EMERGENCY DISCHARGES Permit Number: 01CHE0003 Permit Version: 1 Receiving Water: UNNAMED TRIB OF THORNTON BROOK	Status: CONSENT REVOKED OR REVISED - NEW CONSENT ISSUED (37(1)) Issue date: - Effective Date: 01/01/1995 Revocation Date: 02/09/2010
CT	447m S	THORNTON-LE-MOORS WW NTWK PS 11004, S/O NO. 8 PARK ROAD, THORNTON-LE-MOORS, CHESTER, CHESHIRE, CH2 4JH	Effluent Type: MISCELLANEOUS DISCHARGES - EMERGENCY DISCHARGES Permit Number: 016881536 Permit Version: 1 Receiving Water: TO DITCH	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: - Effective Date: 01/01/1900 Revocation Date: 01/01/1900
CT	452m S	THORNTON-LE-MOORS WW NTWK PS 11004, S/O NO. 8 PARK ROAD, THORNTON-LE-MOORS, CHESTER, CHESHIRE, CH2 4JH	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01CHE0003 Permit Version: 3 Receiving Water: UNNAMED TRIB OF THORNTON BROOK	Status: VARIED UNDER EPR 2010 Issue date: 10/06/2016 Effective Date: 10/06/2016 Revocation Date: -
79	487m W	CLEANAWAY LTD, DOCKYARD ROAD, ELLESMERE PORT, CHESHIRE	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: 016890925 Permit Version: 1 Receiving Water: RIVER GOWY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 27/07/1990 Revocation Date: 23/09/1993
80	495m SW	BURMAH CASTROL LTD, STANLOW, ELLESMERE PORT, CHESHIRE	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016890010 Permit Version: 1 Receiving Water: RIVER GOWY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/01/1900 Revocation Date: 01/01/1900

This data is sourced from the Environment Agency and Natural Resources Wales.

4.15 Pollutant release to surface waters (Red List)

Records within 500m

0

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.



4.16 Pollutant release to public sewer

Records within 500m

0

Discharges of Special Category Effluents to the public sewer.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.17 List 1 Dangerous Substances

Records within 500m

0

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.18 List 2 Dangerous Substances

Records within 500m

8

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

Features are displayed on the Current industrial land use map on [page 167 >](#)

ID	Location	Name	Status	Receiving Water	Authorised Substances
Y	On site	Shell Oil Products Ltd , Stanlow Manufacturing Complex	Active	Mersey Estuary	Cyanide, pH, Phenol
Y	On site	Shell Oil Products Ltd , Stanlow Manufacturing Complex	Active	Mersey Estuary	Cyanide, pH, Phenol
Y	On site	Shell Oil Products Ltd , Stanlow Manufacturing Complex	Active	Mersey Estuary	Cyanide, pH, Phenol
AH	On site	Shell (uk) Ltd, Stanlow Manufacturing Complex	Not Active	Mersey Estuary	Copper, Nickel, Zinc, Benzene, Toluene, Xylene
BF	116m NW	Air Products Ltd (including Ici Agricultural Division)	Not Active	Mersey Estuary	Chromium
CH	282m W	Associated Octel Co Ltd, Ellesmere Port	Active	Mersey EstuaryRiver Mersey	Lead
CH	282m W	Associated Octel Co Ltd, Ellesmere Port	Not Active	Mersey EstuaryRiver Mersey	Arsenic, Copper, Lead, Nickel, Zinc
CH	282m W	Associated Octel Co Ltd, Ellesmere Port	Active	Mersey Estuary	Lead

This data is sourced from the Environment Agency and Natural Resources Wales.



4.19 Pollution Incidents (EA/NRW)

Records within 500m

7

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

Features are displayed on the Current industrial land use map on [page 167](#) >

ID	Location	Details	
I	On site	Incident Date: 22/08/2018 Incident Identification: 1646077 Pollutant: Organic Chemicals/Products Pollutant Description: Hydrocarbons	Water Impact: Category 3 (Minor) Land Impact: Category 1 (Major) Air Impact: Category 3 (Minor)
BF	83m N	Incident Date: 20/08/2002 Incident Identification: 101734 Pollutant: Organic Chemicals/Products Pollutant Description: Other Organic Chemical or Product	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
CC	230m NW	Incident Date: 08/04/2003 Incident Identification: 149504 Pollutant: Organic Chemicals/Products Pollutant Description: Other Organic Chemical or Product	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
CC	230m NW	Incident Date: 29/07/2002 Incident Identification: 95367 Pollutant: Oils and Fuel Pollutant Description: Other Oil or Fuel	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
CM	351m N	Incident Date: 24/07/2023 Incident Identification: 2173669 Pollutant: Oils and Fuel Pollutant Description: Petrol	Water Impact: Category 3 (Minor) Land Impact: Category 2 (Significant) Air Impact: Category 2 (Significant)
CM	360m N	Incident Date: 24/07/2023 Incident Identification: 2173760 Pollutant: Oils and Fuel Pollutant Description: Petrol	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 2 (Significant)
CT	447m S	Incident Date: 28/03/2002 Incident Identification: 67449 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

This data is sourced from the Environment Agency and Natural Resources Wales.



4.20 Pollution inventory substances

Records within 500m

38

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

Features are displayed on the Current industrial land use map on [page 167 >](#)

ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
WASTEWATER	XYLENE - ALL ISOMERS	-	-

ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
CONTROLLED WATERS	ZINC	-	-

ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
CONTROLLED WATERS	PHENOLS - TOTAL AS C	-	-



ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
AIR	CHLORINE AND INORGANIC CHLORINE COMPOUNDS - AS HCL	-	-

ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
AIR	PARTICULATE MATTER - PM10	-	-

ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
CONTROLLED WATERS	XYLENE - ALL ISOMERS	-	-

ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
WASTEWATER	ARSENIC	-	-



ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
AIR	MERCURY	-	-

ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
WASTEWATER	TOLUENE	-	-

ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
WASTEWATER	BENZENE	-	-

ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
AIR	PARTICULATE MATTER - TOTAL	-	-



ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
CONTROLLED WATERS	NITROGEN - AS TOTAL N	-	-

ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
WASTEWATER	LEAD	-	-

ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
WASTEWATER	PHENOLS - TOTAL AS C	-	-

ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
WASTEWATER	MERCURY	-	-



ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
AIR	CARBON MONOXIDE	-	-

ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
AIR	NON-METHANE VOLATILE ORGANIC COMPOUNDS (NMVOCs)	-	-

ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
WASTEWATER	ZINC	-	-

ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
CONTROLLED WATERS	ETHYL BENZENE	-	-



ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
AIR	METHANE	-	-

ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
CONTROLLED WATERS	TOLUENE	-	-

ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
AIR	SULPHUR OXIDES (SO2 AND SO3) AS SO2	-	-

ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
AIR	COPPER	-	-



ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
WASTEWATER	NICKEL	-	-

ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
CONTROLLED WATERS	CADMIUM	-	-

ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
WASTEWATER	COPPER	-	-

ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
AIR	CARBON DIOXIDE	-	-



ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
WASTEWATER	ETHYL BENZENE	-	-

ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
AIR	BENZENE	-	-

ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
CONTROLLED WATERS	BENZENE	-	-

ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
AIR	CHROMIUM	-	-



ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
AIR	CADMIUM	-	-

ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
AIR	BENZO(B)FLUORANTHENE	-	-
CONTROLLED WATERS	COPPER	-	-
CONTROLLED WATERS	LEAD	-	-
CONTROLLED WATERS	MERCURY	-	-
CONTROLLED WATERS	NICKEL	-	-
AIR	DIOXINS AND FURANS (PCDDS/PCDFS) - AS WHO TEQ	-	-
CONTROLLED WATERS	CYANIDES - AS CN	-	-
CONTROLLED WATERS	FLUORIDES - AS F	-	-
AIR	INDENO(1,2,3-CD)PYRENE	-	-
AIR	NAPHTHALENE	-	-
CONTROLLED WATERS	ARSENIC	-	-
CONTROLLED WATERS	CHROMIUM	-	-
AIR	AMMONIA	-	-
AIR	ANTHRACENE	-	-
AIR	LEAD	-	-
AIR	SELENIUM	-	-



Route	Substance	Reporting threshold (kg)	Quantity (kg)
AIR	ZINC	-	-
WASTEWATER	CADMIUM	-	-
WASTEWATER	CHROMIUM	-	-
AIR	FLUORINE AND INORGANIC FLUORINE COMPOUNDS - AS HF	-	-
AIR	BENZO(K)FLUORANTHENE	-	-
AIR	DIOXINS AND FURANS (PCDDS/PCDFS) - AS ITEQ	-	-
AIR	HYDROFLUOROCARBONS (HFCS)	-	-
AIR	HYDROCHLOROFUOROCARBONS (HCFCs)	-	-
AIR	POLYCHLORINATED BIPHENYLS (PCBS) - AS WHO TEQ	-	-
AIR	BENZO(A)PYRENE	-	-

ID: AI, Location: On site, Permit: FP3139FN
 Operator: Essar Oil (UK) Limited
 Activity: Refining mineral oils
 Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
 Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
 Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
AIR	NITROGEN OXIDES (NO AND NO2) AS NO2	-	-

ID: AI, Location: On site, Permit: FP3139FN
 Operator: Essar Oil (UK) Limited
 Activity: Refining mineral oils
 Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
 Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
 Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
AIR	NICKEL	-	-



ID: AI, Location: On site, Permit: FP3139FN
Operator: Essar Oil (UK) Limited
Activity: Refining mineral oils
Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
AIR	ARSENIC	-	-

ID: AX, Location: 31m N, Permit: LP3233DK
Operator: Argent Energy Limited
Activity: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS
Address: Stanlow Biodiesel Plant Oil Sites Road Ellesmere Port CH65 4BD
Sector: Chemicals, Sub-sector: Chemicals
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
AIR	CARBON MONOXIDE	-	-
AIR	NITROGEN OXIDES (NO AND NO2) AS NO2	-	-
AIR	AMMONIA	-	-
AIR	NON-METHANE VOLATILE ORGANIC COMPOUNDS (NMVOCs)	-	-
AIR	PARTICULATE MATTER - TOTAL	-	-
AIR	SULPHUR OXIDES (SO2 AND SO3) AS SO2	-	-
AIR	CARBON DIOXIDE	-	-

ID: AX, Location: 31m N, Permit: LP3233DK
Operator: Argent Energy Limited
Activity: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS
Address: Stanlow Biodiesel Plant Oil Sites Road Ellesmere Port CH65 4BD
Sector: Chemicals, Sub-sector: Chemicals
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
WASTEWATER	TOTAL ORGANIC CARBON (TOC)	-	-

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.



4.21 Pollution inventory waste transfers

Records within 500m

2

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

Features are displayed on the Current industrial land use map on [page 167 >](#)

ID: AI, Location: On site, Permit: FP3139FN
 Operator: Essar Oil (UK) Limited
 Activity: Refining mineral oils
 Address: Stanlow Manufacturing Complex P O Box 3 CH65 4HB
 Sector: Refineries & Fuel, Sub-sector: Refineries & Fuel
 Releases:

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
R5	RECYCLING/RECLAMATION OF OTHER INORGANIC MATERIALS	-	ABSOLUTE VALUE	16 08 04	SPENT FLUID CATALYTIC CRACKING CATALYSTS (EXCEPT 16 08 07)	NO
R4	RECYCLING/RECLAMATION OF METALS AND METAL COMPOUNDS	-	ABSOLUTE VALUE	17 04 05	IRON AND STEEL	NO
D14	REPACKAGING PRIOR TO SUBMISSION TO ANY OF THE OPERATIONS NUMBERED D1 TO D13	-	ABSOLUTE VALUE	17 06 04	INSULATION MATERIALS OTHER THAN THOSE MENTIONED IN 17 06 01 AND 17 06 03	NO
R10	LAND TREATMENT RESULTING IN BENEFIT TO AGRICULTURE OR ECOLOGICAL IMPROVEMENT	-	ABSOLUTE VALUE	19 09 02	SLUDGES FROM WATER CLARIFICATION	NO
D1	DEPOSIT INTO OR ONTO LAND (EG LANDFILL, ETC.)	-	ABSOLUTE VALUE	20 01 08	BIODEGRADABLE KITCHEN AND CANTEEN WASTE	NO
R3	RECYCLING/RECLAMATION OF ORGANIC SUBSTANCES WHICH ARE NOT USED AS SOLVENTS (INCLUDING COMPOSTING AND OTHER BIOLOGICAL TRANSFORMATION PROCESSES)	-	ABSOLUTE VALUE	20 01 38	WOOD OTHER THAN THAT MENTIONED IN 20 01 37	NO
R4	RECYCLING/RECLAMATION OF METALS AND METAL COMPOUNDS	-	ABSOLUTE VALUE	20 01 40	METALS	NO



Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
R12	EXCHANGE OF WASTES OBTAINED FROM ANY OF THE OPERATIONS NUMBERD R1 TO R11	-	ABSOLUTE VALUE	20 02 01	BIODEGRADABLE WASTE	NO
R12	EXCHANGE OF WASTES OBTAINED FROM ANY OF THE OPERATIONS NUMBERD R1 TO R11	-	ABSOLUTE VALUE	20 03 01	MIXED MUNICIPAL WASTE	NO
R5	RECYCLING/RECLAMATION OF OTHER INORGANIC MATERIALS	-	ABSOLUTE VALUE	06 03 14	SOLID SALTS AND SOLUTIONS OTHER THAN THOSE MENTIONED IN 06 03 11 AND 06 03 13	NO
R4	RECYCLING/RECLAMATION OF METALS AND METAL COMPOUNDS	-	ABSOLUTE VALUE	05 01 06	OILY SLUDGES FROM MAINTENANCE OPERATIONS OF THE PLANT OR EQUIPMENT	YES
D10	INCINERATION ON LAND	-	ABSOLUTE VALUE	05 01 09	SLUDGES FROM ON-SITE EFFLUENT TREATMENT CONTAINING DANGEROUS SUBSTANCES	YES
R1	USE PRINCIPALLY AS A FUEL OR OTHER MEANS TO GENERATE ENERGY	-	ABSOLUTE VALUE	06 02 04	SODIUM AND POTASSIUM HYDROXIDE	YES
R12	EXCHANGE OF WASTES OBTAINED FROM ANY OF THE OPERATIONS NUMBERD R1 TO R11	-	ABSOLUTE VALUE	06 02 05	OTHER BASES	YES
D1	DEPOSIT INTO OR ONTO LAND (EG LANDFILL, ETC.)	-	ABSOLUTE VALUE	06 03 15	METALLIC OXIDES CONTAINING HEAVY METALS	YES
D10	INCINERATION ON LAND	-	ABSOLUTE VALUE	06 13 02	SPENT ACTIVATED CARBON (EXCEPT 06 07 02)	YES
D1	DEPOSIT INTO OR ONTO LAND (EG LANDFILL, ETC.)	-	ABSOLUTE VALUE	10 01 14	BOTTOM ASH, SLAG AND BOILER DUST FROM CO-INCINERATION CONTAINING DANGEROUS SUBSTANCES	YES
D1	DEPOSIT INTO OR ONTO LAND (EG LANDFILL, ETC.)	-	ABSOLUTE VALUE	12 01 16	WASTE BLASTING MATERIAL CONTAINING DANGEROUS SUBSTANCES	YES



Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D9	PHYSIO-CHEMICAL TREATMENT NOT SPECIFIED ELSEWHERE IN THIS TABLE WHICH RESULTS IN FINAL COMPOUNDS OR MIXTURES WHICH ARE DISCARDED BY MEANS OF ANY OF THE OPERATIONS NUMBERED D1 TO D12 (EG EVAPORATION, DRYING, CALCINATION, ETC.)	-	ABSOLUTE VALUE	15 01 10	PACKAGING CONTAINING RESIDUES OF OR CONTAMINATED BY DANGEROUS SUBSTANCES	YES
R11	USE OF WASTES OBTAINED FROM ANY OF THE OPERATIONS NUMBERED R1 TO R10	-	ABSOLUTE VALUE	15 01 10	PACKAGING CONTAINING RESIDUES OF OR CONTAMINATED BY DANGEROUS SUBSTANCES	YES
D10	INCINERATION ON LAND	-	ABSOLUTE VALUE	15 02 02	ABSORBENTS, FILTER MATERIALS (INCLUDING OIL FILTERS NOT OTHERWISE SPECIFIED), WIPING CLOTHS, PROTECTIVE CLOTHING CONTAMINATED BY DANGEROUS SUBSTANCES	YES
R1	USE PRINCIPALLY AS A FUEL OR OTHER MEANS TO GENERATE ENERGY	-	ABSOLUTE VALUE	15 02 02	ABSORBENTS, FILTER MATERIALS (INCLUDING OIL FILTERS NOT OTHERWISE SPECIFIED), WIPING CLOTHS, PROTECTIVE CLOTHING CONTAMINATED BY DANGEROUS SUBSTANCES	YES
R4	RECYCLING/RECLAMATION OF METALS AND METAL COMPOUNDS	-	ABSOLUTE VALUE	16 08 07	SPENT CATALYSTS CONTAMINATED WITH DANGEROUS SUBSTANCES	YES
D10	INCINERATION ON LAND	-	ABSOLUTE VALUE	16 10 01	AQUEOUS LIQUID WASTES CONTAINING DANGEROUS SUBSTANCES	YES
D1	DEPOSIT INTO OR ONTO LAND (EG LANDFILL, ETC.)	-	ABSOLUTE VALUE	16 11 05	LININGS AND REFRACTORIES FROM NON-METALLURGICAL PROCESSES CONTAINING DANGEROUS SUBSTANCES	YES
D1	DEPOSIT INTO OR ONTO LAND (EG LANDFILL, ETC.)	-	ABSOLUTE VALUE	17 03 01	BITUMINOUS MIXTURES CONTAINING COAL TAR	YES
D1	DEPOSIT INTO OR ONTO LAND (EG LANDFILL, ETC.)	-	ABSOLUTE VALUE	17 05 03	SOIL AND STONES CONTAINING DANGEROUS SUBSTANCES	YES



Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D9	PHYSIO-CHEMICAL TREATMENT NOT SPECIFIED ELSEWHERE IN THIS TABLE WHICH RESULTS IN FINAL COMPOUNDS OR MIXTURES WHICH ARE DISCARDED BY MEANS OF ANY OF THE OPERATIONS NUMERES D1 TO D12 (EG EVAPORATION, DRYING, CALCINATION, ETC.)	-	ABSOLUTE VALUE	17 05 03	SOIL AND STONES CONTAINING DANGEROUS SUBSTANCES	YES
R4	RECYCLING/RECLAMATION OF METALS AND METAL COMPOUNDS	-	ABSOLUTE VALUE	20 01 35	DISCARDED ELECTRICAL AND ELECTRONIC EQUIPMENT OTHER THAN THOSE MENTIONED IN 20 01 21 AND 20 01 23 CONTAINING HAZARDOUS COMPONENTS (6)	YES
D9	PHYSIO-CHEMICAL TREATMENT NOT SPECIFIED ELSEWHERE IN THIS TABLE WHICH RESULTS IN FINAL COMPOUNDS OR MIXTURES WHICH ARE DISCARDED BY MEANS OF ANY OF THE OPERATIONS NUMERES D1 TO D12 (EG EVAPORATION, DRYING, CALCINATION, ETC.)	-	ABSOLUTE VALUE	20 01 37	WOOD CONTAINING DANGEROUS SUBSTANCES	YES
D1	DEPOSIT INTO OR ONTO LAND (EG LANDFILL, ETC.)	-	ABSOLUTE VALUE	17 06 01	INSULATION MATERIALS CONTAINING ASBESTOS	YES
D9	PHYSIO-CHEMICAL TREATMENT NOT SPECIFIED ELSEWHERE IN THIS TABLE WHICH RESULTS IN FINAL COMPOUNDS OR MIXTURES WHICH ARE DISCARDED BY MEANS OF ANY OF THE OPERATIONS NUMERES D1 TO D12 (EG EVAPORATION, DRYING, CALCINATION, ETC.)	-	ABSOLUTE VALUE	19 01 11	BOTTOM ASH AND SLAG CONTAINING DANGEROUS SUBSTANCES	YES

ID: AX, Location: 31m N, Permit: LP3233DK
 Operator: Argent Energy Limited
 Activity: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS
 Address: Stanlow Biodiesel Plant Oil Sites Road Ellesmere Port CH65 4BD
 Sector: Chemicals, Sub-sector: Chemicals
 Releases:



Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D13	BLENDING OR MIXING PRIOR TO SUBMISSION TO ANY OF THE OPERATORS NUMBERED D1 TO D12	-	ABSOLUTE VALUE	19 05 02	NON-COMPOSTED FRACTION OF ANIMAL AND VEGETABLE WASTE	NO
R1	USE PRINCIPALLY AS A FUEL OR OTHER MEANS TO GENERATE ENERGY	-	ABSOLUTE VALUE	19 12 07	WOOD OTHER THAN THAT MENTIONED IN 19 12 06	NO
R3	RECYCLING/RECLAMATION OF ORGANIC SUBSTANCES WHICH ARE NOT USED AS SOLVENTS (INCLUDING COMPOSTING AND OTHER BIOLOGICAL TRANSFORMATION PROCESSES)	-	ABSOLUTE VALUE	19 02 03	PREMIXED WASTES COMPOSED ONLY OF NON-HAZARDOUS WASTES	NO
R3	RECYCLING/RECLAMATION OF ORGANIC SUBSTANCES WHICH ARE NOT USED AS SOLVENTS (INCLUDING COMPOSTING AND OTHER BIOLOGICAL TRANSFORMATION PROCESSES)	-	ABSOLUTE VALUE	19 02 10	COMBUSTIBLE WASTES OTHER THAN THOSE MENTIONED IN 19 02 08 AND 19 02 09	NO
R13	STORAGE OF WASTES PENDING ANY OF THE OPERATIONS NUMBERED R1 TO R12 (EXCLUDING TEMPORARY STORAGE, PENDING COLLECTION, ON THE SITE WHERE IT IS PRODUCED)	-	ABSOLUTE VALUE	20 01 25	EDIBLE OIL AND FAT	NO
R13	STORAGE OF WASTES PENDING ANY OF THE OPERATIONS NUMBERED R1 TO R12 (EXCLUDING TEMPORARY STORAGE, PENDING COLLECTION, ON THE SITE WHERE IT IS PRODUCED)	-	ABSOLUTE VALUE	02 02 99	WASTES NOT OTHERWISE SPECIFIED	NO
R13	STORAGE OF WASTES PENDING ANY OF THE OPERATIONS NUMBERED R1 TO R12 (EXCLUDING TEMPORARY STORAGE, PENDING COLLECTION, ON THE SITE WHERE IT IS PRODUCED)	-	ABSOLUTE VALUE	02 03 04	MATERIALS UNSUITABLE FOR CONSUMPTION OR PROCESSING	NO

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.



4.22 Pollution inventory radioactive waste

Records within 500m

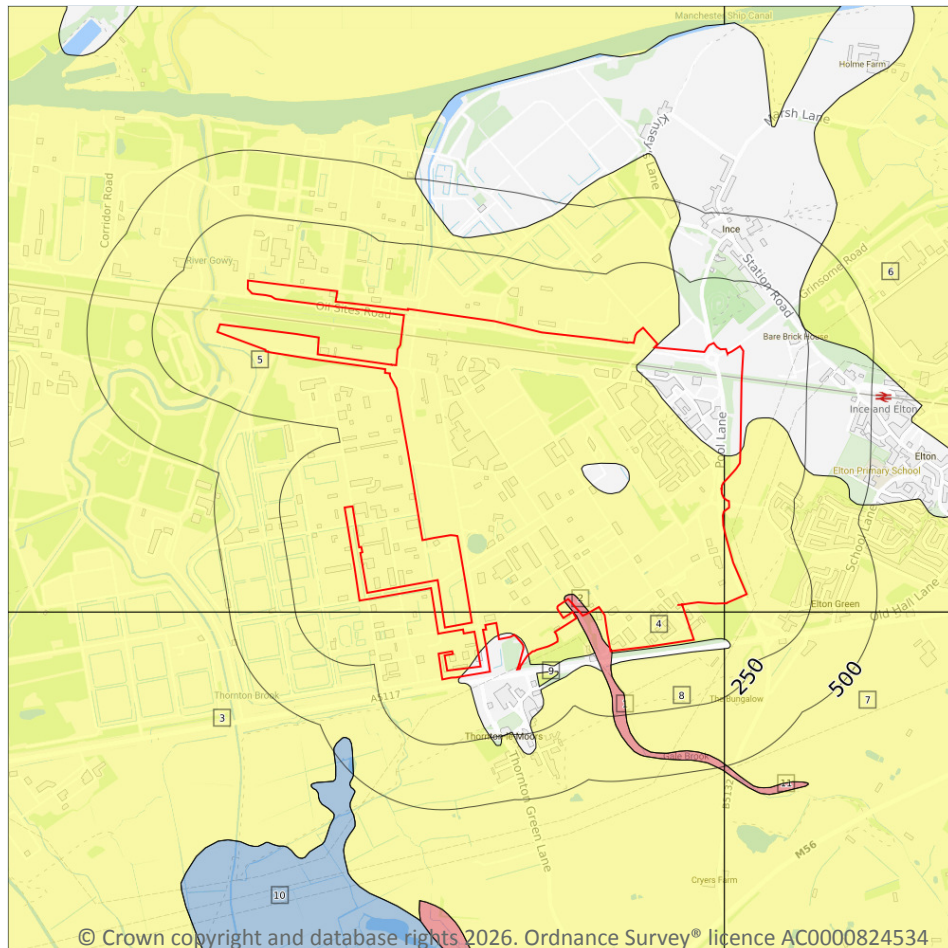
0

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.



5 Hydrogeology - Superficial aquifer



- Site Outline**
- Search buffers in metres (m)**
- Principal
 - Secondary A
 - Secondary B
 - Secondary Undifferentiated
 - Unproductive
 - Unknown

5.1 Superficial aquifer

Records within 500m

11

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on [page 259](#) >

ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

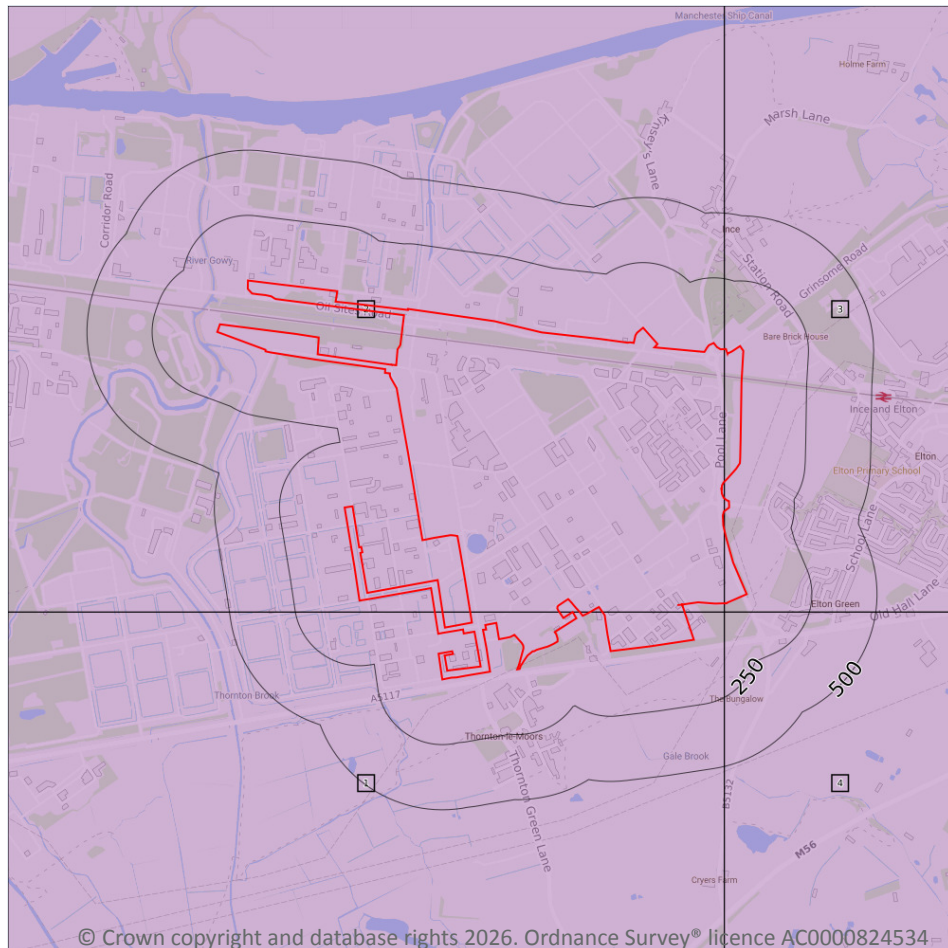


ID	Location	Designation	Description
3	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
4	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
5	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
6	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
7	33m S	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
8	43m S	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
9	67m SE	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
10	424m SW	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
11	491m S	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.



Bedrock aquifer



- Site Outline
- Search buffers in metres (m)
- Principal
 - Secondary A
 - Secondary B
 - Secondary Undifferentiated
 - Unproductive

5.2 Bedrock aquifer

Records within 500m

4

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on [page 261](#) >

ID	Location	Designation	Description
1	On site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
2	On site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers

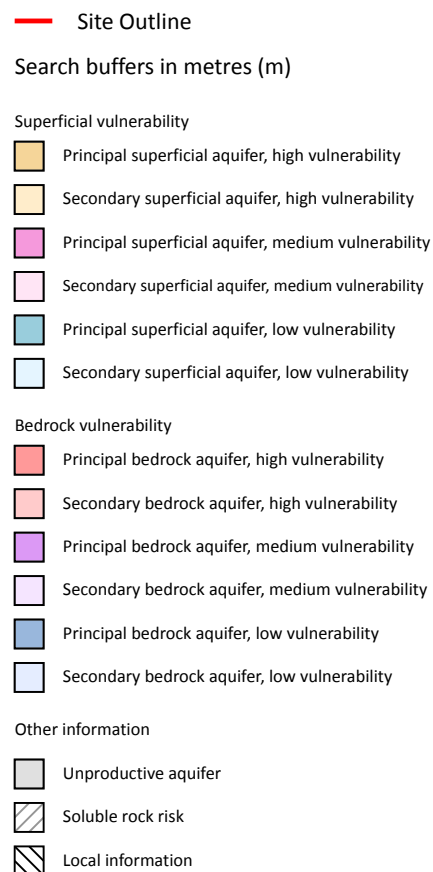
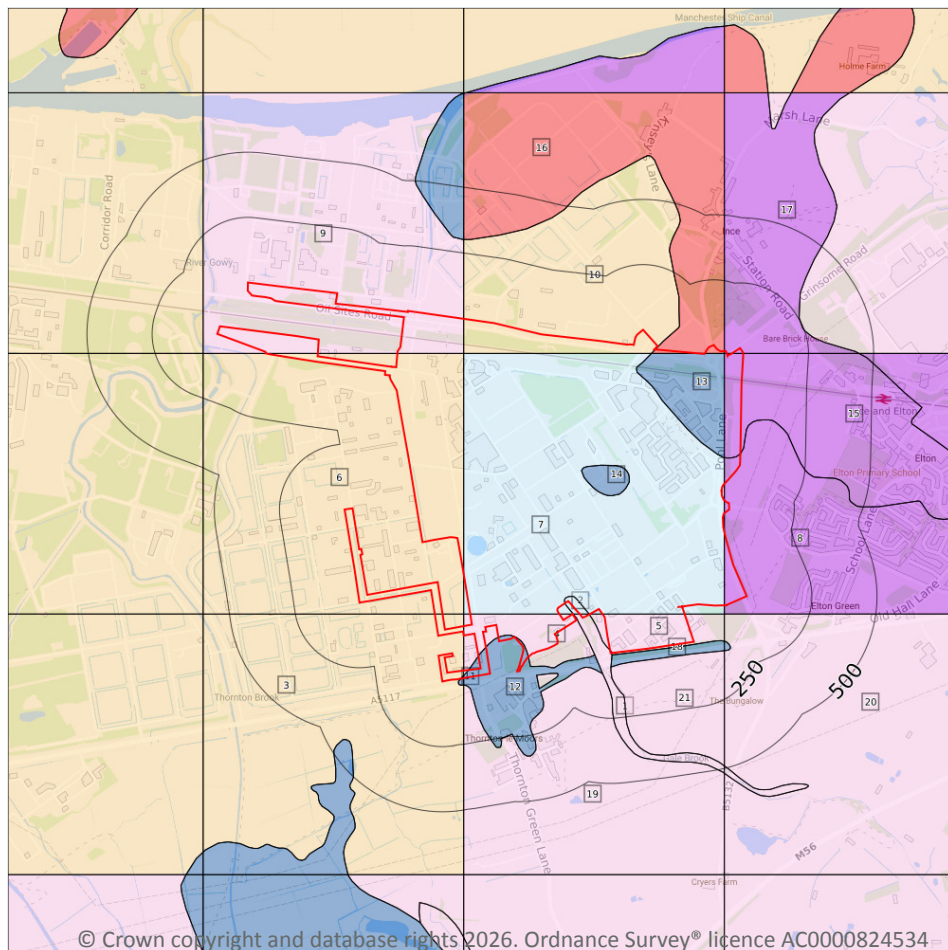


ID	Location	Designation	Description
3	On site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
4	33m S	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.



Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m

21

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on [page 263](#) >



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: Low	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed
2	On site	Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: 3-10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed
3	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: High	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed
4	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: Low	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed
5	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: Low	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed
6	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: High	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
7	On site	Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: 3-10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed
8	On site	Summary Classification: Principal bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Medium Aquifer type: Principal Flow mechanism: Mixed
9	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: 300- 550mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: High	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed
10	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: 300- 550mm/year	Vulnerability: High Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Mixed
11	On site	Summary Classification: Principal bedrock aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: >10m Patchiness value: >90% Recharge potential: High	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed
12	On site	Summary Classification: Principal bedrock aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: Low	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed
13	On site	Summary Classification: Principal bedrock aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
14	On site	Summary Classification: Principal bedrock aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed
15	On site	Summary Classification: Principal bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Medium Aquifer type: Principal Flow mechanism: Mixed
16	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: 300- 550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Mixed
17	On site	Summary Classification: Principal bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: >70% Dilution value: 300- 550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Medium Aquifer type: Principal Flow mechanism: Mixed
18	8m S	Summary Classification: Principal bedrock aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: Low	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed
19	27m S	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: Low	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed
20	33m S	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
21	43m S	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: Low	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

5.4 Groundwater vulnerability- soluble rock risk

Records on site	0
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This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

This data is sourced from the British Geological Survey and the Environment Agency.

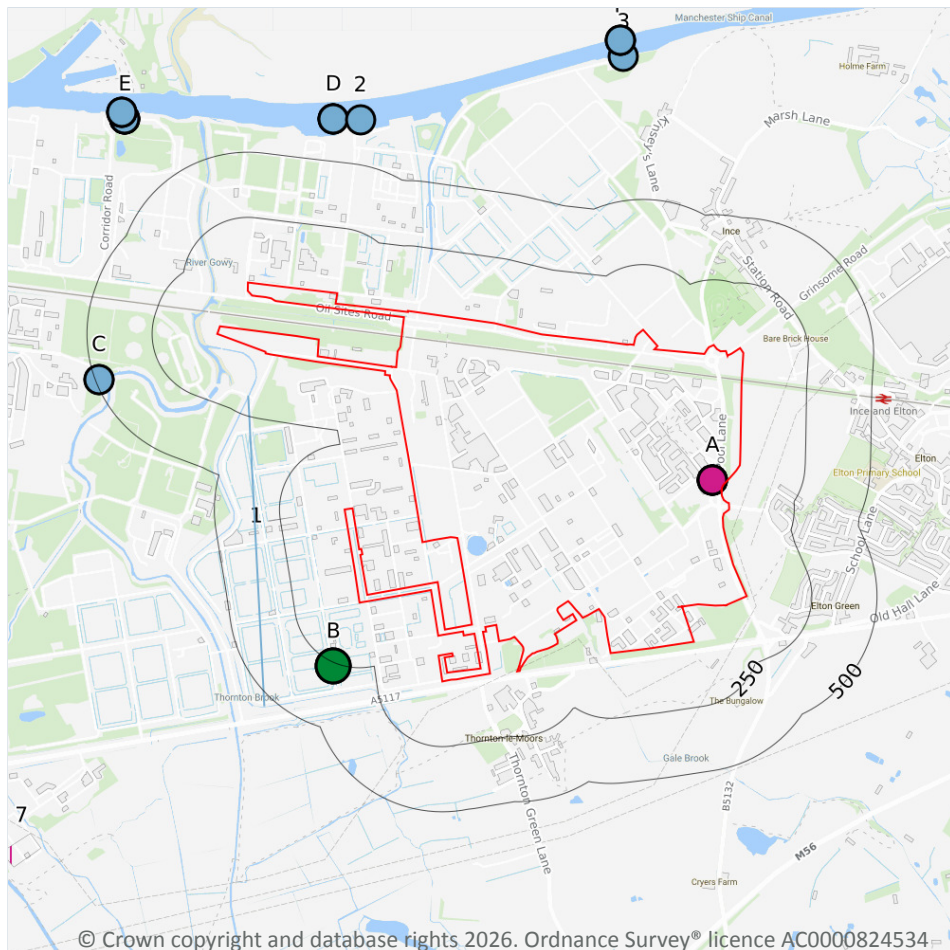
5.5 Groundwater vulnerability- local information

Records on site	0
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This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on enquiries@environment-agency.gov.uk ↗.

This data is sourced from the British Geological Survey and the Environment Agency.

Abstractions and Source Protection Zones



- Site Outline
- Search buffers in metres (m)**
- Source Protection Zone 1
Inner catchment
- Source Protection Zone 2
Outer catchment
- Source Protection Zone 3
Total catchment
- Source Protection Zone 4
Zone of Special Interest
- Source Protection Zone 1c
Inner catchment - confined aquifer
- Source Protection Zone 2c
Outer catchment - confined aquifer
- Source Protection Zone 3c
Total catchment - confined aquifer
- Drinking water abstraction licences
Polygon features
- Drinking water abstraction licences
Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

5.6 Groundwater abstractions

Records within 2000m

36

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on [page 268](#) >

ID	Location	Details	
A	On site	Status: Active Licence No: NW/068/0006/012 Details: Boiler Feed Direct Source: Ground Water - North West Region Point: B/HOLE NO 7 AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: University of Chester Easting: 344954 Northing: 375514	Annual Volume (m ³): 955636 Max Daily Volume (m ³): 2618.2 Original Application No: NPS/WR/015641 Original Start Date: 13/01/2014 Expiry Date: 31/03/2028 Issue No: 2 Version Start Date: 24/04/2014 Version End Date: -
A	On site	Status: Active Licence No: NW/068/0006/012 Details: General Cooling (Existing Licences Only) (High Loss) Direct Source: Ground Water - North West Region Point: B/HOLE NO 7 AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: University of Chester Easting: 344954 Northing: 375514	Annual Volume (m ³): 955636 Max Daily Volume (m ³): 2618.2 Original Application No: NPS/WR/015641 Original Start Date: 13/01/2014 Expiry Date: 31/03/2028 Issue No: 2 Version Start Date: 24/04/2014 Version End Date: -
A	On site	Status: Active Licence No: NW/068/0006/012 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: B/HOLE NO 7 AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: University of Chester Easting: 344954 Northing: 375514	Annual Volume (m ³): 955636 Max Daily Volume (m ³): 2618.2 Original Application No: NPS/WR/015641 Original Start Date: 13/01/2014 Expiry Date: 31/03/2028 Issue No: 2 Version Start Date: 24/04/2014 Version End Date: -
A	On site	Status: Active Licence No: NW/068/0006/012 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: B/HOLE NO 7 AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: University of Chester Easting: 344954 Northing: 375514	Annual Volume (m ³): 955636 Max Daily Volume (m ³): 2618.2 Original Application No: NPS/WR/015641 Original Start Date: 13/01/2014 Expiry Date: 31/03/2028 Issue No: 2 Version Start Date: 24/04/2014 Version End Date: -



ID	Location	Details	
A	On site	Status: Active Licence No: NW/068/0006/012 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: B/HOLE NO 7 AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: University of Chester Easting: 344954 Northing: 375514	Annual Volume (m³): 955636 Max Daily Volume (m³): 2618.2 Original Application No: NPS/WR/015641 Original Start Date: 13/01/2014 Expiry Date: 31/03/2028 Issue No: 2 Version Start Date: 24/04/2014 Version End Date: -
A	On site	Status: Active Licence No: NW/068/0006/012 Details: Process Water Direct Source: Ground Water - North West Region Point: B/HOLE NO 7 AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: University of Chester Easting: 344954 Northing: 375514	Annual Volume (m³): 955636 Max Daily Volume (m³): 2618.2 Original Application No: NPS/WR/015641 Original Start Date: 13/01/2014 Expiry Date: 31/03/2028 Issue No: 2 Version Start Date: 24/04/2014 Version End Date: -
B	264m S	Status: Active Licence No: NW/068/0006/011 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: B/HOLES (22) AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: Essar Oil (UK) Ltd Easting: 343500 Northing: 374800	Annual Volume (m³): 8997914 Max Daily Volume (m³): 24657.82 Original Application No: NPS/WR/014887 Original Start Date: 13/01/2014 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 13/01/2014 Version End Date: -
B	264m S	Status: Active Licence No: NW/068/0006/011 Details: General Cooling (Existing Licences Only) (High Loss) Direct Source: Ground Water - North West Region Point: B/HOLES (22) AT THORNTON LE MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: Essar Oil (UK) Ltd Easting: 343500 Northing: 374800	Annual Volume (m³): 8997914 Max Daily Volume (m³): 24657.82 Original Application No: NPS/WR/014887 Original Start Date: 13/01/2014 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 13/01/2014 Version End Date: -



ID	Location	Details	
B	264m S	Status: Active Licence No: NW/068/0006/011 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: B/HOLES (22) AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: Essar Oil (UK) Ltd Easting: 343500 Northing: 374800	Annual Volume (m ³): 8997914 Max Daily Volume (m ³): 24657.82 Original Application No: NPS/WR/014887 Original Start Date: 13/01/2014 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 13/01/2014 Version End Date: -
B	264m S	Status: Active Licence No: NW/068/0006/011 Details: Process Water Direct Source: Ground Water - North West Region Point: B/HOLES (22) AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: Essar Oil (UK) Ltd Easting: 343500 Northing: 374800	Annual Volume (m ³): 8997914 Max Daily Volume (m ³): 24657.82 Original Application No: NPS/WR/014887 Original Start Date: 13/01/2014 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 13/01/2014 Version End Date: -
B	264m S	Status: Active Licence No: NW/068/0006/011 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: B/HOLES (22) AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: Essar Oil (UK) Ltd Easting: 343500 Northing: 374800	Annual Volume (m ³): 8997914 Max Daily Volume (m ³): 24657.82 Original Application No: NPS/WR/014887 Original Start Date: 13/01/2014 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 13/01/2014 Version End Date: -
B	264m S	Status: Active Licence No: NW/068/0006/011 Details: Boiler Feed Direct Source: Ground Water - North West Region Point: B/HOLES (21) AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: Essar Oil (UK) Ltd Easting: 343500 Northing: 374800	Annual Volume (m ³): 8997914 Max Daily Volume (m ³): 24657.82 Original Application No: NPS/WR/014887 Original Start Date: 13/01/2014 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 13/01/2014 Version End Date: -



ID	Location	Details	
B	264m S	Status: Historical Licence No: 2568006001 Details: "Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services" Direct Source: Ground Water - North West Region Point: "B/HOLES (22) AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT" Data Type: Point Name: SHELL REFINING COMPANY LTD Easting: 343500 Northing: 374800	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 24/03/1966 Version End Date: -
B	264m S	Status: Historical Licence No: 2568006001 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: "B/HOLES (22) AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT" Data Type: Point Name: SHELL REFINING COMPANY LTD Easting: 343500 Northing: 374800	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 24/03/1966 Version End Date: -
B	264m S	Status: Historical Licence No: 2568006001 Details: Process water Direct Source: Ground Water - North West Region Point: "B/HOLES (22) AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT" Data Type: Point Name: SHELL REFINING COMPANY LTD Easting: 343500 Northing: 374800	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 24/03/1966 Version End Date: -
B	264m S	Status: Historical Licence No: 2568006001 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "B/HOLES (22) AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT" Data Type: Point Name: SHELL REFINING COMPANY LTD Easting: 343500 Northing: 374800	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 24/03/1966 Version End Date: -



ID	Location	Details	
B	264m S	Status: Historical Licence No: 2568006001 Details: Boiler Feed Direct Source: Ground Water - North West Region Point: "B/HOLES (22) AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT" Data Type: Point Name: SHELL REFINING COMPANY LTD Easting: 343500 Northing: 374800	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 24/03/1966 Version End Date: -
B	264m S	Status: Historical Licence No: 2568006001 Details: General Cooling (Existing Licences Only) (High Loss) Direct Source: Ground Water - North West Region Point: "B/HOLES (22) AT THORNTON LE MOORS & STANLOW, ELLESMERE PORT" Data Type: Point Name: SHELL REFINING COMPANY LTD Easting: 343500 Northing: 374800	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 24/03/1966 Version End Date: -
B	264m S	Status: Historical Licence No: 2568006001 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: B/HOLES (22) AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: Essar Oil (UK) Ltd Easting: 343500 Northing: 374800	Annual Volume (m ³): 9953550 Max Daily Volume (m ³): 27276 Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 102 Version Start Date: 17/10/2011 Version End Date: -
B	264m S	Status: Historical Licence No: 2568006001 Details: Boiler Feed Direct Source: Ground Water - North West Region Point: B/HOLES (22) AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: Essar Oil (UK) Ltd Easting: 343500 Northing: 374800	Annual Volume (m ³): 9953550 Max Daily Volume (m ³): 27276 Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 102 Version Start Date: 17/10/2011 Version End Date: -



ID	Location	Details	
B	264m S	Status: Historical Licence No: 2568006001 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: B/HOLES (22) AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: Essar Oil (UK) Ltd Easting: 343500 Northing: 374800	Annual Volume (m ³): 9953550 Max Daily Volume (m ³): 27276 Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 102 Version Start Date: 17/10/2011 Version End Date: -
B	264m S	Status: Historical Licence No: 2568006001 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: B/HOLES (22) AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: Essar Oil (UK) Ltd Easting: 343500 Northing: 374800	Annual Volume (m ³): 9953550 Max Daily Volume (m ³): 27276 Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 102 Version Start Date: 17/10/2011 Version End Date: -
B	264m S	Status: Historical Licence No: 2568006001 Details: General Cooling (Existing Licences Only) (High Loss) Direct Source: Ground Water - North West Region Point: B/HOLES (22) AT THORNTON LE MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: Essar Oil (UK) Ltd Easting: 343500 Northing: 374800	Annual Volume (m ³): 9953550 Max Daily Volume (m ³): 27276 Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 102 Version Start Date: 17/10/2011 Version End Date: -
B	264m S	Status: Historical Licence No: 2568006001 Details: Process Water Direct Source: Ground Water - North West Region Point: B/HOLES (22) AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: Essar Oil (UK) Ltd Easting: 343500 Northing: 374800	Annual Volume (m ³): 9953550 Max Daily Volume (m ³): 27276 Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 102 Version Start Date: 17/10/2011 Version End Date: -



ID	Location	Details	
B	264m S	Status: Historical Licence No: NW/068/0006/012 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: B/HOLES (22) AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: SHELL RESEARCH LTD Easting: 343500 Northing: 374800	Annual Volume (m ³): 955636 Max Daily Volume (m ³): 2618.18 Original Application No: - Original Start Date: 13/01/2014 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 13/01/2014 Version End Date: -
B	264m S	Status: Historical Licence No: NW/068/0006/012 Details: General Cooling (Existing Licences Only) (High Loss) Direct Source: Ground Water - North West Region Point: B/HOLES (22) AT THORNTON LE MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: SHELL RESEARCH LTD Easting: 343500 Northing: 374800	Annual Volume (m ³): 955636 Max Daily Volume (m ³): 2618.18 Original Application No: - Original Start Date: 13/01/2014 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 13/01/2014 Version End Date: -
B	264m S	Status: Historical Licence No: NW/068/0006/012 Details: Boiler Feed Direct Source: Ground Water - North West Region Point: B/HOLES (22) AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: SHELL RESEARCH LTD Easting: 343500 Northing: 374800	Annual Volume (m ³): 955636 Max Daily Volume (m ³): 2618.18 Original Application No: - Original Start Date: 13/01/2014 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 13/01/2014 Version End Date: -
B	264m S	Status: Historical Licence No: NW/068/0006/012 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: B/HOLES (22) AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: SHELL RESEARCH LTD Easting: 343500 Northing: 374800	Annual Volume (m ³): 955636 Max Daily Volume (m ³): 2618.18 Original Application No: - Original Start Date: 13/01/2014 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 13/01/2014 Version End Date: -



ID	Location	Details	
B	264m S	Status: Historical Licence No: NW/068/0006/012 Details: Process Water Direct Source: Ground Water - North West Region Point: B/HOLES (22) AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: SHELL RESEARCH LTD Easting: 343500 Northing: 374800	Annual Volume (m ³): 955636 Max Daily Volume (m ³): 2618.18 Original Application No: - Original Start Date: 13/01/2014 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 13/01/2014 Version End Date: -
-	1511m SW	Status: Active Licence No: 2568006112 Details: Evaporative Cooling Direct Source: Ground Water - North West Region Point: BOREHOLE AT THE LICENCE HOLDERS LAND AT NEWBRIDGE ROAD Data Type: Point Name: AIR PRODUCTS BR LTD Easting: 341900 Northing: 375100	Annual Volume (m ³): 150000 Max Daily Volume (m ³): 450 Original Application No: NPS/WR/045041 Original Start Date: 12/04/1988 Expiry Date: - Issue No: 102 Version Start Date: 13/05/2025 Version End Date: -
-	1511m SW	Status: Active Licence No: 2568006112 Details: Non-Evaporative Cooling Direct Source: Ground Water - North West Region Point: BOREHOLE AT THE LICENCE HOLDERS LAND AT NEWBRIDGE ROAD Data Type: Point Name: AIR PRODUCTS BR LTD Easting: 341900 Northing: 375100	Annual Volume (m ³): 150000 Max Daily Volume (m ³): 450 Original Application No: NPS/WR/045041 Original Start Date: 12/04/1988 Expiry Date: - Issue No: 102 Version Start Date: 13/05/2025 Version End Date: -
-	1511m SW	Status: Historical Licence No: 2568006112 Details: Evaporative Cooling Direct Source: Ground Water - North West Region Point: "BOREHOLE AT THE LICENCE HOLDERS LAND AT NEWBRIDGE ROAD, LITT" Data Type: Point Name: AIR PRODUCTS BR LTD Easting: 341900 Northing: 375100	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 12/04/1988 Expiry Date: - Issue No: 101 Version Start Date: 28/02/2003 Version End Date: -



ID	Location	Details	
-	1511m SW	Status: Historical Licence No: 2568006112 Details: Non-Evaporative Cooling Direct Source: Ground Water - North West Region Point: "BOREHOLE AT THE LICENCE HOLDERS LAND AT NEWBRIDGE ROAD, LITT" Data Type: Point Name: AIR PRODUCTS BR LTD Easting: 341900 Northing: 375100	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 12/04/1988 Expiry Date: - Issue No: 101 Version Start Date: 28/02/2003 Version End Date: -
-	1511m SW	Status: Historical Licence No: 2568006112 Details: Evaporative Cooling Direct Source: Ground Water - North West Region Point: BOREHOLE AT THE LICENCE HOLDERS LAND AT NEWBRIDGE ROAD, LITT Data Type: Point Name: AIR PRODUCTS BR LTD Easting: 341900 Northing: 375100	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 12/04/1988 Expiry Date: - Issue No: 101 Version Start Date: 28/02/2003 Version End Date: -
-	1511m SW	Status: Historical Licence No: 2568006112 Details: Non-Evaporative Cooling Direct Source: Ground Water - North West Region Point: BOREHOLE AT THE LICENCE HOLDERS LAND AT NEWBRIDGE ROAD, LITT Data Type: Point Name: AIR PRODUCTS BR LTD Easting: 341900 Northing: 375100	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 12/04/1988 Expiry Date: - Issue No: 101 Version Start Date: 28/02/2003 Version End Date: -
7	1543m SW	Status: Historical Licence No: NW/068/0006/018 Details: Dewatering Direct Source: Ground Water - North West Region Point: ELLESMERE PORT WASTEWATER TREATMENT WORKS Data Type: Poly4 Name: Volkerstevin Limited Easting: 342226 Northing: 374086	Annual Volume (m ³): 182500 Max Daily Volume (m ³): 500 Original Application No: - Original Start Date: 08/08/2018 Expiry Date: 31/07/2020 Issue No: 1 Version Start Date: 08/08/2018 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.



5.7 Surface water abstractions

Records within 2000m

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Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on [page 268](#) >

ID	Location	Details	
1	175m SW	Status: Active Licence No: NW/068/0006/016 Details: Hydraulic Testing Direct Source: Surface, Non-Tidal - North West Region Point: INLAND WATER - THORNTON BROOK AT STANLOW MANUFACTURING Data Type: Line Name: Essar Oil (UK) LTD Easting: 343173 Northing: 375839	Annual Volume (m ³): 41500 Max Daily Volume (m ³): 2420 Original Application No: NPS/WR/026617 Original Start Date: 07/12/2017 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 01/04/2024 Version End Date: -
C	487m W	Status: Active Licence No: 2568006113 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: R GOWY AT STANLOW Data Type: Point Name: VEOLIA ENVIRONMENTAL SERVICES (UK) LTD Easting: 342600 Northing: 375900	Annual Volume (m ³): 2186670 Max Daily Volume (m ³): 6000 Original Application No: NPS/WR/009540 Original Start Date: 20/02/1989 Expiry Date: - Issue No: 102 Version Start Date: 19/06/2008 Version End Date: -
C	487m W	Status: Active Licence No: 2568006113 Details: Gas Suppression/Scrubbing Direct Source: Surface, Non-Tidal - North West Region Point: R GOWY AT STANLOW Data Type: Point Name: VEOLIA ENVIRONMENTAL SERVICES (UK) LTD Easting: 342600 Northing: 375900	Annual Volume (m ³): 2186670 Max Daily Volume (m ³): 6000 Original Application No: NPS/WR/009540 Original Start Date: 20/02/1989 Expiry Date: - Issue No: 102 Version Start Date: 19/06/2008 Version End Date: -



ID	Location	Details	
D	663m N	Status: Historical Licence No: 2568009001 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL AT ELLESMERE PORT \$77 Data Type: Point Name: SHELL UK OIL PRODUCTS LTD Easting: 343500 Northing: 376900	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 14/02/1966 Expiry Date: - Issue No: 101 Version Start Date: 12/03/2001 Version End Date: -
D	663m N	Status: Historical Licence No: 2568009001 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL AT ELLESMERE PORT 77 Data Type: Point Name: SHELL UK OIL PRODUCTS LTD Easting: 343500 Northing: 376900	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 14/02/1966 Expiry Date: - Issue No: 101 Version Start Date: 12/03/2001 Version End Date: -
D	663m N	Status: Historical Licence No: 2568009001 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL AT ELLESMERE PORT Data Type: Point Name: SHELL UK OIL PRODUCTS LTD Easting: 343500 Northing: 376900	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 14/02/1966 Expiry Date: - Issue No: 101 Version Start Date: 12/03/2001 Version End Date: -
D	663m N	Status: Historical Licence No: 2568009001 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL ELLESMERE PORT Data Type: Point Name: Essar Oil (UK) LTD Easting: 343500 Northing: 376900	Annual Volume (m³): - Max Daily Volume (m³): 60000000 Original Application No: - Original Start Date: 14/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 19/01/2012 Version End Date: -

ID	Location	Details	
2	671m N	Status: Active Licence No: 2568009001 Details: Non-Evaporative Cooling Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL ELLESMERE PORT Data Type: Point Name: Essar Oil (UK) LTD Easting: 343603 Northing: 376896	Annual Volume (m ³): 60000000 Max Daily Volume (m ³): 60000000 Original Application No: NPS/WR/011431 Original Start Date: 14/02/1966 Expiry Date: - Issue No: 103 Version Start Date: 14/09/2012 Version End Date: -
E	786m NW	Status: Historical Licence No: 2568009001 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL AT ELLESMERE PORT I657 Data Type: Point Name: SHELL UK OIL PRODUCTS LTD Easting: 342700 Northing: 376900	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 14/02/1966 Expiry Date: - Issue No: 101 Version Start Date: 12/03/2001 Version End Date: -
E	786m NW	Status: Historical Licence No: 2568009001 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL AT ELLESMERE PORT Data Type: Point Name: SHELL UK OIL PRODUCTS LTD Easting: 342700 Northing: 376900	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 14/02/1966 Expiry Date: - Issue No: 101 Version Start Date: 12/03/2001 Version End Date: -
E	786m NW	Status: Historical Licence No: 2568009001 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL ELLESMERE PORT Data Type: Point Name: Essar Oil (UK) LTD Easting: 342700 Northing: 376900	Annual Volume (m ³): - Max Daily Volume (m ³): 60000000 Original Application No: - Original Start Date: 14/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 19/01/2012 Version End Date: -



ID	Location	Details	
E	786m NW	Status: Historical Licence No: 2568009017 Details: Gas Suppression/Scrubbing Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL ELLESMERE PORT Data Type: Point Name: VEOLIA ENVIRONMENTAL SERVICES (UK) LTD Easting: 342700 Northing: 376900	Annual Volume (m ³): 2186670 Max Daily Volume (m ³): 6000 Original Application No: - Original Start Date: 05/02/1990 Expiry Date: - Issue No: 103 Version Start Date: 19/06/2008 Version End Date: -
E	786m NW	Status: Historical Licence No: 2568009017 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL ELLESMERE PORT Data Type: Point Name: VEOLIA ENVIRONMENTAL SERVICES (UK) LTD Easting: 342700 Northing: 376900	Annual Volume (m ³): 2186670 Max Daily Volume (m ³): 6000 Original Application No: - Original Start Date: 05/02/1990 Expiry Date: - Issue No: 103 Version Start Date: 19/06/2008 Version End Date: -
E	812m NW	Status: Active Licence No: 2568009017 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL ELLESMERE PORT Data Type: Point Name: VEOLIA ENVIRONMENTAL SERVICES (UK) LTD Easting: 342689 Northing: 376925	Annual Volume (m ³): 2186670 Max Daily Volume (m ³): 6000 Original Application No: - Original Start Date: 05/02/1990 Expiry Date: - Issue No: 103 Version Start Date: 19/06/2008 Version End Date: -
E	812m NW	Status: Active Licence No: 2568009017 Details: Gas Suppression/Scrubbing Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL ELLESMERE PORT Data Type: Point Name: VEOLIA ENVIRONMENTAL SERVICES (UK) LTD Easting: 342689 Northing: 376925	Annual Volume (m ³): 2186670 Max Daily Volume (m ³): 6000 Original Application No: - Original Start Date: 05/02/1990 Expiry Date: - Issue No: 103 Version Start Date: 19/06/2008 Version End Date: -
E	812m NW	Status: Active Licence No: 2568009001 Details: Non-Evaporative Cooling Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL ELLESMERE PORT Data Type: Point Name: Essar Oil (UK) LTD Easting: 342689 Northing: 376925	Annual Volume (m ³): 60000000 Max Daily Volume (m ³): 60000000 Original Application No: NPS/WR/011431 Original Start Date: 14/02/1966 Expiry Date: - Issue No: 103 Version Start Date: 14/09/2012 Version End Date: -



ID	Location	Details	
3	1050m N	Status: Active Licence No: 2568009001 Details: Non-Evaporative Cooling Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL ELLESMERE PORT Data Type: Point Name: Essar Oil (UK) LTD Easting: 344613 Northing: 377138	Annual Volume (m ³): 60000000 Max Daily Volume (m ³): 60000000 Original Application No: NPS/WR/011431 Original Start Date: 14/02/1966 Expiry Date: - Issue No: 103 Version Start Date: 14/09/2012 Version End Date: -
F	1113m N	Status: Historical Licence No: 2568009001 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL AT ELLESMERE PORT *25 Data Type: Point Name: SHELL UK OIL PRODUCTS LTD Easting: 344600 Northing: 377200	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 14/02/1966 Expiry Date: - Issue No: 101 Version Start Date: 12/03/2001 Version End Date: -
F	1113m N	Status: Historical Licence No: 2568009001 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL AT ELLESMERE PORT Data Type: Point Name: SHELL UK OIL PRODUCTS LTD Easting: 344600 Northing: 377200	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 14/02/1966 Expiry Date: - Issue No: 101 Version Start Date: 12/03/2001 Version End Date: -
F	1113m N	Status: Historical Licence No: 2568009001 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL ELLESMERE PORT Data Type: Point Name: Essar Oil (UK) LTD Easting: 344600 Northing: 377200	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 14/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 19/01/2012 Version End Date: -



ID	Location	Details	
-	1393m S	Status: Active Licence No: NW/068/0006/004 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: Surface, Non-Tidal - North West Region Point: POINT D GOWY MEADOWS Data Type: Point Name: The Cheshire Wildlife Trust Limited Easting: 343425 Northing: 373439	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: NPS/WR/008397 Original Start Date: 12/01/2012 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 12/01/2012 Version End Date: -
-	1478m S	Status: Active Licence No: NW/068/0006/004 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: Surface, Non-Tidal - North West Region Point: POINT B GOWY MEADOWS Data Type: Point Name: The Cheshire Wildlife Trust Limited Easting: 343465 Northing: 373334	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: NPS/WR/008397 Original Start Date: 12/01/2012 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 12/01/2012 Version End Date: -
-	1482m NW	Status: Historical Licence No: 2568009005 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL AT ELLESMERE PORT Data Type: Point Name: BASF PLC Easting: 341870 Northing: 376980	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 14/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 02/07/1998 Version End Date: -
-	1582m S	Status: Active Licence No: NW/068/0006/004 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: Surface, Non-Tidal - North West Region Point: POINT C GOWY MEADOWS Data Type: Point Name: The Cheshire Wildlife Trust Limited Easting: 343508 Northing: 373213	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: NPS/WR/008397 Original Start Date: 12/01/2012 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 12/01/2012 Version End Date: -



ID	Location	Details	
-	1664m S	Status: Active Licence No: NW/068/0006/004 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: Surface, Non-Tidal - North West Region Point: POINT A GOWY MEADOWS Data Type: Point Name: The Cheshire Wildlife Trust Limited Easting: 343543 Northing: 373120	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: NPS/WR/008397 Original Start Date: 12/01/2012 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 12/01/2012 Version End Date: -
-	1717m NW	Status: Active Licence No: 2568009012 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL AT ELLESMERE PORT Data Type: Point Name: INNOSPEC LTD Easting: 341600 Northing: 377000	Annual Volume (m ³): 4546 Max Daily Volume (m ³): 4546 Original Application No: 2293 Original Start Date: 04/03/1970 Expiry Date: - Issue No: 102 Version Start Date: 01/06/2006 Version End Date: -
-	1717m NW	Status: Active Licence No: 2568009012 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL AT ELLESMERE PORT Data Type: Point Name: INNOSPEC LTD Easting: 341600 Northing: 377000	Annual Volume (m ³): 4546 Max Daily Volume (m ³): 4546 Original Application No: 2293 Original Start Date: 04/03/1970 Expiry Date: - Issue No: 102 Version Start Date: 01/06/2006 Version End Date: -
-	1717m NW	Status: Historical Licence No: 2568009012 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL AT ELLESMERE PORT Data Type: Point Name: ASSOCIATED OCTEL CO LTD Easting: 341600 Northing: 377000	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 04/03/1970 Expiry Date: - Issue No: 101 Version Start Date: 15/08/2000 Version End Date: -
-	1717m NW	Status: Historical Licence No: 2568009012 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL AT ELLESMERE PORT Data Type: Point Name: ASSOCIATED OCTEL CO LTD Easting: 341600 Northing: 377000	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 04/03/1970 Expiry Date: - Issue No: 101 Version Start Date: 15/08/2000 Version End Date: -



ID	Location	Details	
-	1875m W	Status: Historical Licence No: 2568006093 Details: Process water Direct Source: "Surface, Non-Tidal - North West Region" Point: "SHROPSHIRE UNION CANAL AT PREMISES OF CABOT CARBON LTD., EL" Data Type: Point Name: BRITISH WATERWAYS Easting: 341200 Northing: 375800	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 20/08/1974 Expiry Date: - Issue No: 100 Version Start Date: 20/08/1974 Version End Date: -
-	1875m W	Status: Historical Licence No: 2568006093 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: SHROPSHIRE UNION CANAL AT PREMISES OF CABOT CARBON LTD., EL Data Type: Point Name: BRITISH WATERWAYS BOARD Easting: 341200 Northing: 375800	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 20/08/1974 Expiry Date: - Issue No: 100 Version Start Date: 20/08/1974 Version End Date: -
-	1875m W	Status: Historical Licence No: 2568006093 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: SHROPSHIRE UNION CANAL AT PREMISES OF CABOT CARBON LIMITED Data Type: Point Name: Canal and River Trust Easting: 341200 Northing: 375800	Annual Volume (m ³): 9100 Max Daily Volume (m ³): 2618 Original Application No: - Original Start Date: 20/08/1974 Expiry Date: - Issue No: 100 Version Start Date: 20/08/1974 Version End Date: -
-	1915m NE	Status: Historical Licence No: NW/068/0009/001 Details: Evaporative Cooling Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL, INCE Data Type: Point Name: Covanta Energy Limited Easting: 346369 Northing: 377418	Annual Volume (m ³): 5867448 Max Daily Volume (m ³): 16076 Original Application No: - Original Start Date: 24/01/2011 Expiry Date: 31/03/2028 Issue No: 2 Version Start Date: 06/06/2011 Version End Date: -



ID	Location	Details	
-	1915m NE	Status: Historical Licence No: NW/068/0009/001 Details: Non-Evaporative Cooling Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL, INCE Data Type: Point Name: Covanta Energy Limited Easting: 346369 Northing: 377418	Annual Volume (m ³): 5867448 Max Daily Volume (m ³): 16076 Original Application No: - Original Start Date: 24/01/2011 Expiry Date: 31/03/2028 Issue No: 2 Version Start Date: 06/06/2011 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.8 Potable abstractions

Records within 2000m	5
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Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on [page 268 >](#)

ID	Location	Details	
A	On site	Status: Active Licence No: NW/068/0006/012 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: B/HOLE NO 7 AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: University of Chester Easting: 344954 Northing: 375514	Annual Volume (m³): 955636 Max Daily Volume (m³): 2618.2 Original Application No: NPS/WR/015641 Original Start Date: 13/01/2014 Expiry Date: 31/03/2028 Issue No: 2 Version Start Date: 24/04/2014 Version End Date: -
B	264m S	Status: Active Licence No: NW/068/0006/011 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: B/HOLES (22) AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: Essar Oil (UK) Ltd Easting: 343500 Northing: 374800	Annual Volume (m ³): 8997914 Max Daily Volume (m ³): 24657.82 Original Application No: NPS/WR/014887 Original Start Date: 13/01/2014 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 13/01/2014 Version End Date: -



ID	Location	Details	
B	264m S	Status: Historical Licence No: 2568006001 Details: "Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services" Direct Source: Ground Water - North West Region Point: "B/HOLES (22) AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT" Data Type: Point Name: SHELL REFINING COMPANY LTD Easting: 343500 Northing: 374800	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 24/03/1966 Version End Date: -
B	264m S	Status: Historical Licence No: 2568006001 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: B/HOLES (22) AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: Essar Oil (UK) Ltd Easting: 343500 Northing: 374800	Annual Volume (m ³): 9953550 Max Daily Volume (m ³): 27276 Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 102 Version Start Date: 17/10/2011 Version End Date: -
B	264m S	Status: Historical Licence No: NW/068/0006/012 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: B/HOLES (22) AT THORNTON-LE-MOORS & STANLOW, ELLESMERE PORT Data Type: Point Name: SHELL RESEARCH LTD Easting: 343500 Northing: 374800	Annual Volume (m ³): 955636 Max Daily Volume (m ³): 2618.18 Original Application No: - Original Start Date: 13/01/2014 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 13/01/2014 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.9 Source Protection Zones

Records within 500m

0

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

This data is sourced from the Environment Agency and Natural Resources Wales.



5.10 Source Protection Zones (confined aquifer)

Records within 500m
0

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

This data is sourced from the Environment Agency and Natural Resources Wales.



6 Hydrology



- Site Outline
- Search buffers in metres (m)
- Water Network (OS NGD)
- Surface water features (wider than 5m)
- Surface water features (narrower than 5m)
- ⋯ WFD River, canal and surface water transfer water bodies
- WFD Lake water bodies
- WFD Transitional and coastal water bodies
- WFD Surface water body catchments boundaries
- WFD Groundwater body boundaries

6.1 Water Network (OS NGD)

Records within 250m

226

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on [page 289 >](#)

ID	Location	Type of water feature	Ground level	Permanence	Name
1	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Gale Brook



ID	Location	Type of water feature	Ground level	Permanence	Name
2	On site	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
3	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	Gale Brook
A	On site	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
B	On site	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
B	On site	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
B	On site	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	On site	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
C	On site	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	On site	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	On site	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	On site	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
E	On site	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	On site	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
F	On site	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	On site	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
H	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Gale Brook
H	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	Gale Brook
H	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Gale Brook
I	On site	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
J	On site	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
J	On site	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
J	On site	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
K	On site	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
L	On site	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
M	On site	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
N	On site	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
O	On site	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
P	On site	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
K	1m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
U	2m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
W	4m E	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
V	4m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Gale Brook
X	4m S	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
C	6m S	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Y	6m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Z	9m N	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
Z	9m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Z	9m N	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
AA	9m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
9	11m N	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
AB	11m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AC	15m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AD	16m E	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Z	16m NE	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Z	16m NE	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
10	18m S	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
AE	19m S	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
AE	19m S	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	23m S	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	30m S	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
X	34m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Thornton Brook
AF	39m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	Gale Brook
AF	39m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Gale Brook
AF	40m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Gale Brook
K	40m S	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AF	41m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	Gale Brook
N	41m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Gale Brook
12	42m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Gale Brook
L	42m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
L	44m S	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AG	46m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Thornton Brook
X	47m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Z	47m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Z	48m N	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
AG	48m S	Tidal river or stream.	On ground surface	Watercourse contains water year round (in normal circumstances)	Thornton Brook
AI	51m S	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
15	53m S	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
16	53m S	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AJ	55m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AF	58m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	Gale Brook
AF	59m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Gale Brook
18	60m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Gale Brook



ID	Location	Type of water feature	Ground level	Permanence	Name
AJ	69m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
19	71m SW	Tidal river or stream.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Gowy
W	71m E	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
20	71m SW	Tidal river or stream.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Gowy
AK	74m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
W	78m E	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	79m S	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AL	83m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	Gale Brook
AL	84m NW	Tidal river or stream.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Gowy
AM	85m SW	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
K	86m W	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
AL	88m N	Tidal river or stream.	On ground surface	Watercourse contains water year round (in normal circumstances)	Gale Brook
K	93m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
AN	95m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AK	95m N	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
AL	101m W	Tidal river or stream.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	105m SW	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	105m SW	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
AO	106m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	106m SW	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AL	107m N	Tidal river or stream.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Gowy
AK	110m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AN	116m N	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
AP	117m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	119m S	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AN	119m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
AM	121m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	122m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	123m SW	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
AL	123m NW	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
X	124m SW	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AQ	125m NW	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AQ	126m NW	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
23	129m W	Tidal river or stream.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Gowy
AL	131m W	Tidal river or stream.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AR	132m S	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AL	138m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	140m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	140m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
AS	141m E	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	141m W	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
X	141m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	142m W	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
X	142m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	143m W	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
X	143m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	143m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	145m SW	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
24	149m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	149m S	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	151m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	151m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
X	151m W	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
X	151m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AT	151m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	152m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	158m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	159m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	161m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AK	161m NE	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AK	161m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AK	161m N	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
X	162m W	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
X	166m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	169m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
X	170m S	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	170m S	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AS	171m E	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
AU	172m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AV	172m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
25	173m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AS	176m S	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	178m S	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	178m W	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
AW	178m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AX	178m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	178m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	179m SW	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
AY	179m NE	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	180m SW	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
AZ	180m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Gowy
X	180m SW	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BA	183m N	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
BA	184m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	185m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	188m SW	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
X	188m SW	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BA	190m NW	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
BB	190m NW	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
26	192m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Gowy
X	193m SW	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
BC	194m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BD	197m SW	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	198m S	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BD	198m SW	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
X	200m S	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
X	201m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	201m S	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	201m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	202m W	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
X	202m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BD	202m SW	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AN	203m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AY	203m NE	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
AN	203m N	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
AN	203m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	204m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AU	205m N	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
AT	213m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	213m SW	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
BE	213m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BD	214m SW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AT	214m N	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
BF	214m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AT	217m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	219m SW	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AN	220m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
AN	220m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	220m SW	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	225m NW	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	226m W	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
X	227m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BD	228m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AK	230m NE	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AN	230m N	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
AN	231m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AK	234m N	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
X	236m W	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
X	237m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	238m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
BD	239m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Thornton Brook
28	241m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Thornton Brook Diversion
BD	241m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Thornton Brook
X	242m SW	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
29	242m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Thornton Brook
X	242m SW	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
X	242m SW	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AT	242m N	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-
BD	243m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Thornton Brook
X	244m SW	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BD	244m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	Thornton Brook
AT	245m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	246m SW	Drain. A manmade watercourse for the removal of excess water from an area.	Underground	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
X	246m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	247m W	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BD	249m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Thornton Brook
BG	250m N	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey®.

6.2 Surface water features

Records within 250m	114
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Covering rivers, streams and lakes (some overlap with OS NGD Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on [page 289 >](#)

This data is sourced from the Ordnance Survey®.

6.3 WFD Surface water body catchments

Records on site	2
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The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on [page 289 >](#)

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
7	On site	River	Peckmill Brook, Hoolpool Gutter at Ince Marshes.	GB112068060330	Gowy	Weaver Gowy
8	On site	Coastal Catchment	Not part of a river WB catchment	168	Gowy	Weaver Gowy



This data is sourced from the Environment Agency and Natural Resources Wales.

6.4 WFD Surface water bodies

Records identified	2
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Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each water body listed.

Features are displayed on the Hydrology map on [page 289 >](#)

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
AH	48m SW	Transitional Water	MERSEY	GB531206908100 ↗	No longer applicable	Does not require assessment	Moderate	2022
-	2558m E	River	Peckmill Brook, Hoolpool Gutter at Ince Marshes.	GB112068060330 ↗	No longer applicable	Does not require assessment	Moderate	2022

This data is sourced from the Environment Agency and Natural Resources Wales.

6.5 WFD Groundwater bodies

Records on site	1
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Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

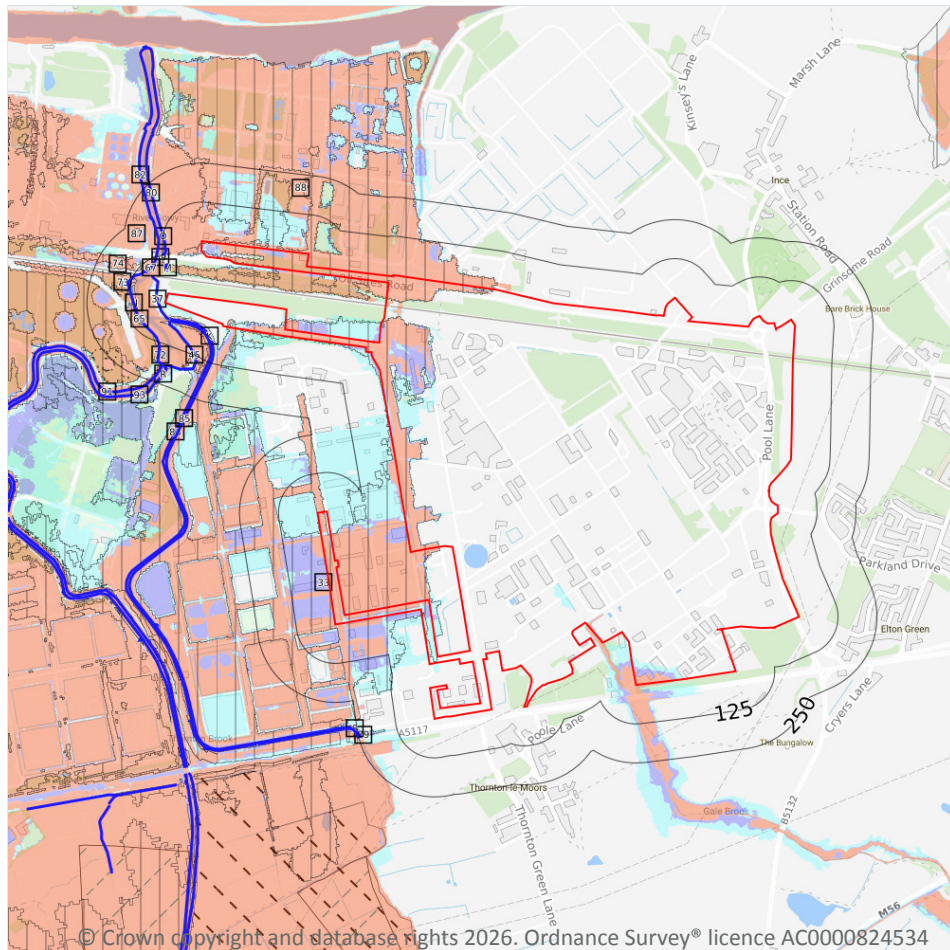
Features are displayed on the Hydrology map on [page 289 >](#)

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
T	On site	Wirral and West Cheshire Permo-Triassic Sandstone Aquifers	GB41101G202600 ↗	Poor	Poor	Good	2019

This data is sourced from the Environment Agency and Natural Resources Wales.



7 River and coastal flooding



- Site Outline
- Search buffers in metres (m)
- River and coastal flooding:
- High
- Medium
- Low
- Very Low
- Historical Flood Events
- Areas Used for Flood Storage
- Areas Benefiting from Flood Defences
- Flood Defences

7.1 Risk of flooding from rivers and the sea

Records within 50m

69

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

Features are displayed on the River and coastal flooding map on [page 309 >](#)



Distance	Flood risk category
On site	High
0 - 50m	High

This data is sourced from the Environment Agency and Natural Resources Wales.

7.2 Historical Flood Events

Records within 250m	0
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Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.3 Flood Defences

Records within 250m	19
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Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

Features are displayed on the River and coastal flooding map on [page 309 >](#)

ID	Location	Update
37	20m W	08/11/2022
K	29m S	08/11/2022
K	37m S	08/11/2022
45	51m S	08/11/2022
M	71m N	08/11/2022
M	84m N	08/11/2022
65	96m W	08/11/2022
67	98m NW	08/11/2022
O	114m W	08/11/2022
O	127m N	08/11/2022



ID	Location	Update
80	168m NW	08/11/2022
82	177m NW	08/11/2022
83	178m SW	08/11/2022
85	179m S	08/11/2022
R	185m S	08/11/2022
R	186m S	08/11/2022
91	242m S	08/11/2022
S	245m W	08/11/2022
93	249m S	08/11/2022

This data is sourced from the Environment Agency and Natural Resources Wales.

7.4 Areas Benefiting from Flood Defences

Records within 250m

12

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on [page 309 >](#)

ID	Location	
33	On site	Area benefiting from flood defences
E	On site	Area benefiting from flood defences
N	89m W	Area benefiting from flood defences
69	99m N	Area benefiting from flood defences
72	107m S	Area benefiting from flood defences
73	108m W	Area benefiting from flood defences
N	108m W	Area benefiting from flood defences
74	114m NW	Area benefiting from flood defences
J	126m S	Area benefiting from flood defences
79	163m W	Area benefiting from flood defences
87	196m W	Area benefiting from flood defences



ID	Location	
88	201m N	Area benefiting from flood defences

This data is sourced from the Environment Agency and Natural Resources Wales.

7.5 Flood Storage Areas

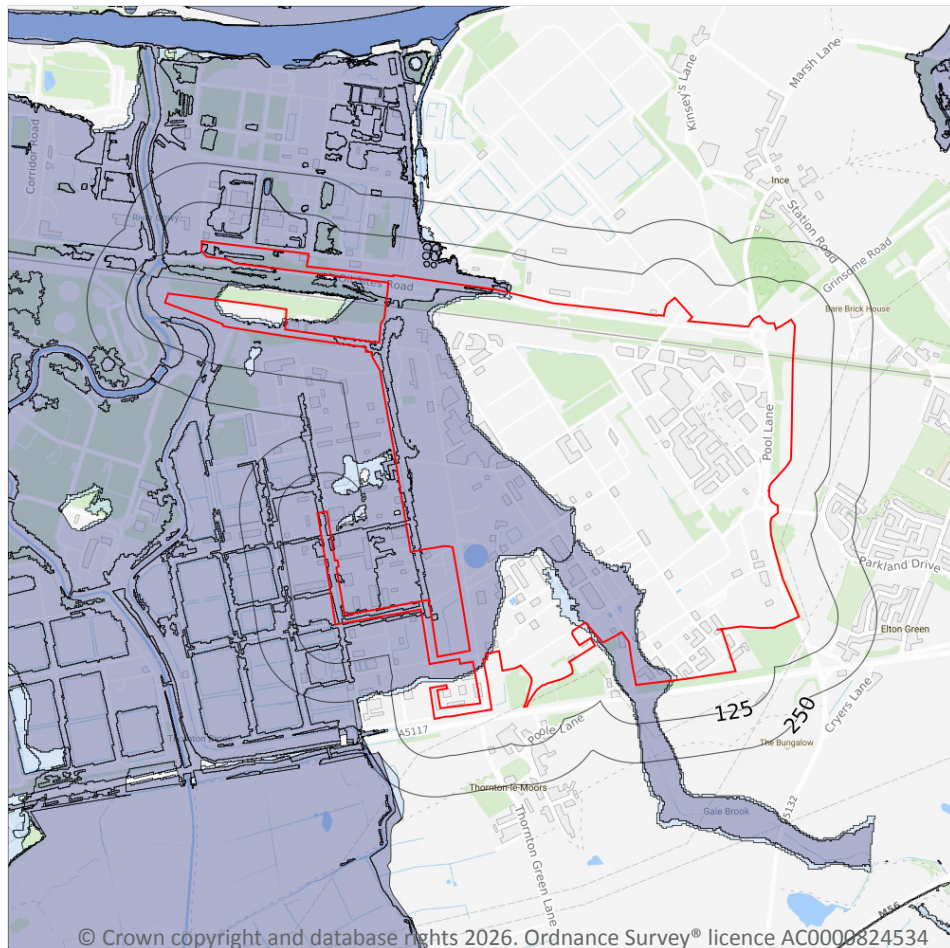
Records within 250m	0
---------------------	---

Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

This data is sourced from the Environment Agency and Natural Resources Wales.



River and coastal flooding - Flood Zones



- Site Outline
- Search buffers in metres (m)
- Flood zone 2
- Flood zone 3

7.6 Flood Zone 2

Records within 50m

1

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

Features are displayed on the River and coastal flooding map on [page 309](#) >

Location	Type
On site	Zone 2 - (Fluvial /Tidal Models)

This data is sourced from the Environment Agency and Natural Resources Wales.



7.7 Flood Zone 3

Records within 50m

1

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on [page 309](#) >

Location	Type
On site	Zone 3 - (Fluvial /Tidal Models)

This data is sourced from the Environment Agency and Natural Resources Wales.



8 Surface water flooding



— Site Outline

Search buffers in metres (m)

1 in 1000 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site

1 in 30 year, Greater than 1.0m

Highest risk within 50m

1 in 30 year, Greater than 1.0m

Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

Features are displayed on the Surface water flooding map on [page 315 >](#)

The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.



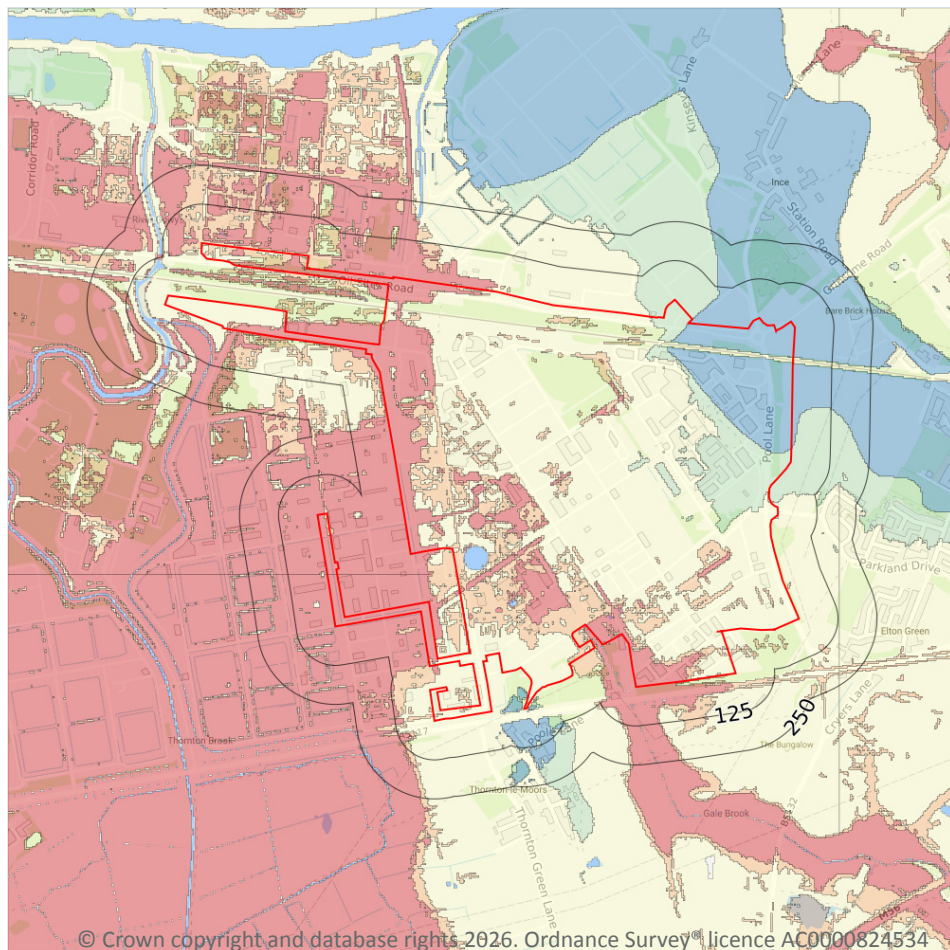
The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Greater than 1.0m
1 in 250 year	Greater than 1.0m
1 in 100 year	Greater than 1.0m
1 in 30 year	Greater than 1.0m

This data is sourced from Ambiantal Risk Analytics.



9 Groundwater flooding



— Site Outline
Search buffers in metres (m)

- High
- Moderate - High
- Moderate
- Low
- Negligible

9.1 Groundwater flooding

Highest risk on site

High

Highest risk within 50m

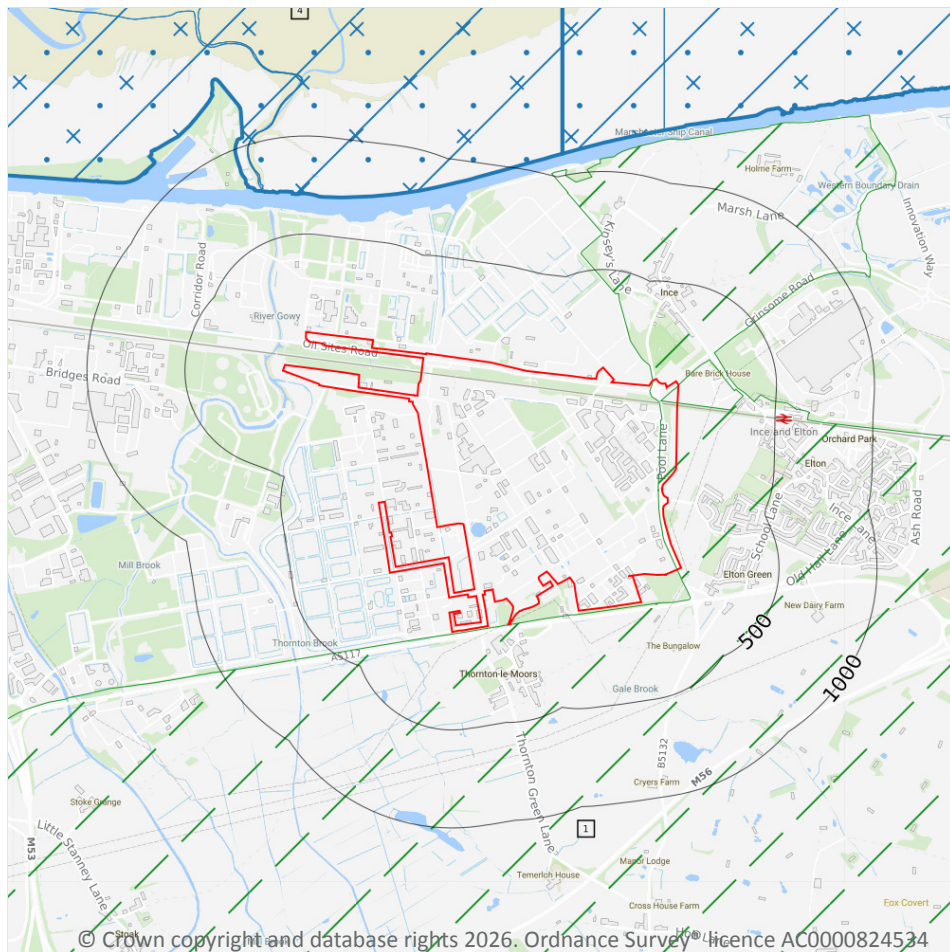
High

Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

Features are displayed on the Groundwater flooding map on [page 317](#) >

This data is sourced from Ambient Risk Analytics.

10 Environmental designations



- Site Outline
- Search buffers in metres (m)
- Sites of Special Scientific Interest (SSSI)
- × Conserved wetland sites (Ramsar sites)
- Special Protection Areas (SPA)
- Green Belt

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

2

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

Features are displayed on the Environmental designations map on [page 318](#) >

ID	Location	Name	Data source
2	694m N	Mersey Estuary SSSI	Natural England



ID	Location	Name	Data source
5	1110m N	Mersey Estuary SSSI	Natural England

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	2
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Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

Features are displayed on the Environmental designations map on [page 318 >](#)

ID	Location	Site	Details
3	694m N	Name: Mersey Estuary Site status: Listed Data source: Natural England	Overview: The Mersey is a large, sheltered estuary which comprises large areas of saltmarsh and extensive intertidal sand and mudflats, with limited areas of brackish marsh, rocky shoreline and boulder clay cliffs, within a rural and industrial environment. The intertidal flats and saltmarshes provide feeding and roosting sites for large and internationally important populations of waterfowl. During the winter, the site is of major importance for duck and waders. The site is also important during spring and autumn migration periods, particularly for wader populations moving along the west coast of Britain. Ramsar criteria: -
-	1858m NW	Name: Mersey Estuary Site status: Listed Data source: Natural England	Overview: The Mersey is a large, sheltered estuary which comprises large areas of saltmarsh and extensive intertidal sand and mudflats, with limited areas of brackish marsh, rocky shoreline and boulder clay cliffs, within a rural and industrial environment. The intertidal flats and saltmarshes provide feeding and roosting sites for large and internationally important populations of waterfowl. During the winter, the site is of major importance for duck and waders. The site is also important during spring and autumn migration periods, particularly for wader populations moving along the west coast of Britain. Ramsar criteria: -

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.3 Special Areas of Conservation (SAC)

Records within 2000m	0
----------------------	---

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.4 Special Protection Areas (SPA)

Records within 2000m	3
----------------------	---

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

Features are displayed on the Environmental designations map on [page 318 >](#)

ID	Location	Name	Species of interest	Habitat description	Data source
4	694m N	Mersey Estuary	Great crested grebe; Common shelduck; Eurasian wigeon; Eurasian teal; Northern pintail; Ringed plover; European golden plover; Grey plover; Northern lapwing; Eurasian curlew; Common redshank; Common redshank; Black-tailed godwit; Dunlin	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes	Natural England
6	1250m N	Mersey Estuary	Great crested grebe; Common shelduck; Eurasian wigeon; Eurasian teal; Northern pintail; Ringed plover; European golden plover; Grey plover; Northern lapwing; Eurasian curlew; Common redshank; Common redshank; Black-tailed godwit; Dunlin	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes	Natural England
-	1858m NW	Mersey Estuary	Great crested grebe; Common shelduck; Eurasian wigeon; Eurasian teal; Northern pintail; Ringed plover; European golden plover; Grey plover; Northern lapwing; Eurasian curlew; Common redshank; Common redshank; Black-tailed godwit; Dunlin	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes	Natural England

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.5 National Nature Reserves (NNR)

Records within 2000m**0**

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.6 Local Nature Reserves (LNR)

Records within 2000m**0**

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.7 Designated Ancient Woodland

Records within 2000m**0**

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.8 Biosphere Reserves

Records within 2000m**0**

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.9 Forest Parks

Records within 2000m**0**

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m**0**

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.11 Green Belt

Records within 2000m**1**

Areas designated to prevent urban sprawl by keeping land permanently open.

Features are displayed on the Environmental designations map on [page 318 >](#)

ID	Location	Name	Local Authority name
1	On site	Merseyside and Greater Manchester Green Belt	Cheshire West and Chester

This data is sourced from the Ministry of Housing, Communities and Local Government.

10.12 Proposed Ramsar sites

Records within 2000m**0**

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

This data is sourced from Natural England.



10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m

0

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

This data is sourced from Natural England and Natural Resources Wales.

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

0

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m

0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m

7

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
On site	River Gowy (Milton Brook to Mersey) NVZ	Surface Water	629	Existing

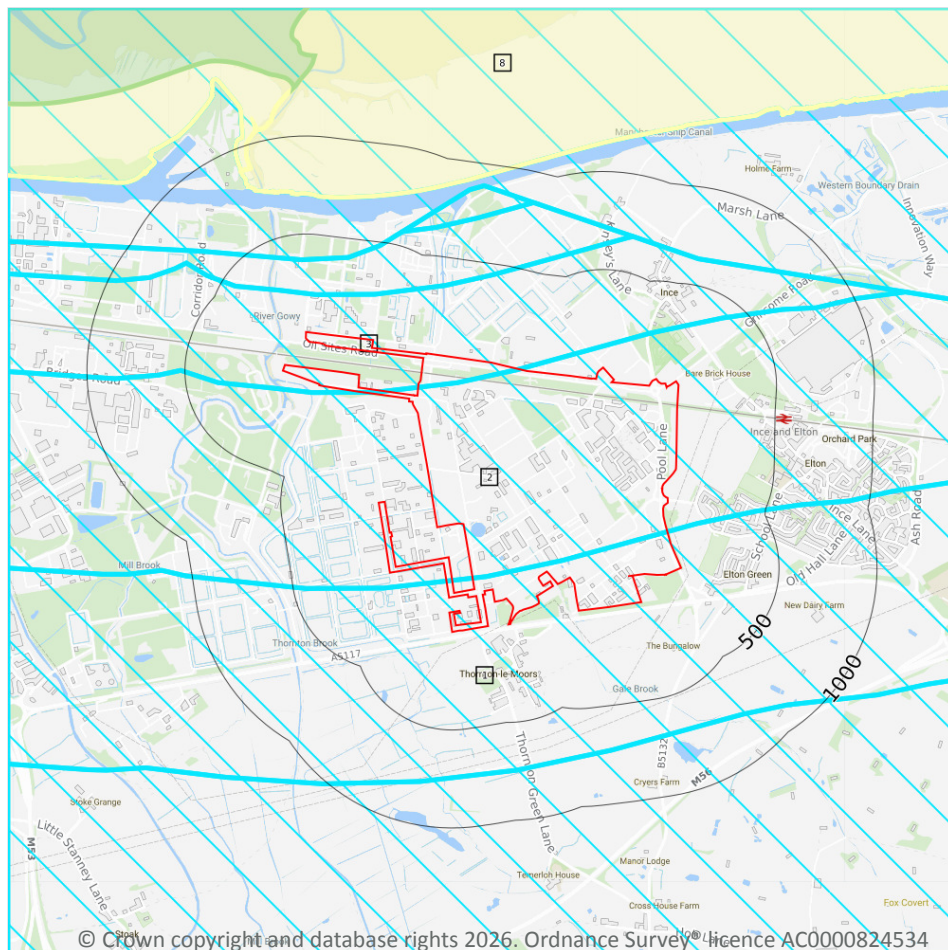


Location	Name	Type	NVZ ID	Status
On site	River Gowy (Milton Brook to Mersey) NVZ	Surface Water	629	Existing
On site	River Gowy (Milton Brook to Mersey) NVZ	Surface Water	629	Existing
148m S	Stanney Mill Brook NVZ	Surface Water	630	Existing
154m W	Stanney Mill Brook NVZ	Surface Water	630	Existing
389m E	Peckmill Brook, Hoolpool Gutter at Ince Marshes. NVZ	Surface Water	635	Existing
1177m E	Peckmill Brook, Hoolpool Gutter at Ince Marshes. NVZ	Surface Water	635	Existing

This data is sourced from Natural England and Natural Resources Wales.



SSSI Impact Zones and Units



- Site Outline
- Search buffers in metres (m)
- SSSI Impact Risk Zones
- SSSI Units
- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

10.17 SSSI Impact Risk Zones

Records on site

3

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. 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.

Features are displayed on the SSSI Impact Zones and Units map on [page 325 >](#)

ID	Location	Type of developments requiring consultation
1	On site	https://irz.geodata.org.uk/IRZ/step2.html?irzcode=0112304432040&notes=11407&location=338678,375867%20(IRZ%20polygon%20centre)
2	On site	https://irz.geodata.org.uk/IRZ/step2.html?irzcode=0112242322340&notes=11407&location=338844,377080%20(IRZ%20polygon%20centre)



ID	Location	Type of developments requiring consultation
3	On site	https://irz.geodata.org.uk/IRZ/step2.html?irzcode=3112241322230&notes=11407&location=339214,377770%20(IRZ%20polygon%20centre)

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	4
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Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

Features are displayed on the SSSI Impact Zones and Units map on [page 325 >](#)

ID: 8
 Location: 694m N
 SSSI name: Mersey Estuary
 Unit name: Ince Bank Saltmarsh South
 Broad habitat: Littoral Sediment
 Condition: Unfavourable - Recovering
 Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Curlew, Numenius arquata	Favourable	12/10/2010
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Favourable	12/10/2010
Aggregations of non-breeding birds - Golden plover, Pluvialis apricaria	Unfavourable - Recovering	12/10/2010
Aggregations of non-breeding birds - Pintail, Anas acuta	Unfavourable - Recovering	12/10/2010
Aggregations of non-breeding birds - Redshank, Tringa totanus	Favourable	12/10/2010
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Favourable	12/10/2010
Aggregations of non-breeding birds - Teal, Anas crecca	Unfavourable - Recovering	12/10/2010
Aggregations of non-breeding birds - Wigeon, Anas penelope	Unfavourable - Recovering	12/10/2010
Black-tailed godwit, Limosa limosa islandica - A616, nb	-	-
Dunlin, Calidris alpina alpina - A672, nb	-	-
Golden plover, Pluvialis apricaria - A140, nb	-	-
More than 20,000 Non-breeding waterbirds	-	-
Pintail, Anas acuta - A054, nb	-	-



Feature name	Feature condition	Date of assessment
Redshank, Tringa totanus - A162, nb	-	-
SM4-28 - Saltmarsh	Unfavourable - Recovering	12/10/2010
Shelduck, Tadorna tadorna - A048, nb	-	-
Teal, Anas crecca - A704, nb	-	-
Waterbird assemblage	-	-

ID: 10
 Location: 882m N
 SSSI name: Mersey Estuary
 Unit name: Manisty Bay
 Broad habitat: Littoral Sediment
 Condition: Unfavourable - Recovering
 Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Curlew, Numenius arquata	Favourable	20/12/2010
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Favourable	20/12/2010
Aggregations of non-breeding birds - Golden plover, Pluvialis apricaria	Unfavourable - Recovering	20/12/2010
Aggregations of non-breeding birds - Pintail, Anas acuta	Unfavourable - Recovering	20/12/2010
Aggregations of non-breeding birds - Redshank, Tringa totanus	Favourable	20/12/2010
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Favourable	20/12/2010
Aggregations of non-breeding birds - Teal, Anas crecca	Unfavourable - Recovering	20/12/2010
Aggregations of non-breeding birds - Wigeon, Anas penelope	Unfavourable - Recovering	20/12/2010
Black-tailed godwit, Limosa limosa islandica - A616, nb	-	-
Dunlin, Calidris alpina alpina - A672, nb	-	-
Golden plover, Pluvialis apricaria - A140, nb	-	-
More than 20,000 Non-breeding waterbirds	-	-
Pintail, Anas acuta - A054, nb	-	-
Redshank, Tringa totanus - A162, nb	-	-
SM4-28 - Saltmarsh	Favourable	20/12/2010
Shelduck, Tadorna tadorna - A048, nb	-	-



Feature name	Feature condition	Date of assessment
Teal, <i>Anas crecca</i> - A704, nb	-	-
Waterbird assemblage	-	-

ID: 11
 Location: 1248m N
 SSSI name: Mersey Estuary
 Unit name: Bromborough, Eastham & Elsmere Port
 Broad habitat: Littoral Sediment
 Condition: Favourable
 Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Curlew, <i>Numenius arquata</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Dunlin, <i>Calidris alpina alpina</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Redshank, <i>Tringa totanus</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Shelduck, <i>Tadorna tadorna</i>	Not Recorded	01/01/1900
Black-tailed godwit, <i>Limosa limosa islandica</i> - A616, nb	-	-
Dunlin, <i>Calidris alpina alpina</i> - A672, nb	-	-
Golden plover, <i>Pluvialis apricaria</i> - A140, nb	-	-
More than 20,000 Non-breeding waterbirds	-	-
Pintail, <i>Anas acuta</i> - A054, nb	-	-
Redshank, <i>Tringa totanus</i> - A162, nb	-	-
SM4-28 - Saltmarsh	Not Recorded	01/01/1900
Shelduck, <i>Tadorna tadorna</i> - A048, nb	-	-
Teal, <i>Anas crecca</i> - A704, nb	-	-
Waterbird assemblage	-	-

ID: -
 Location: 1957m N
 SSSI name: Mersey Estuary
 Unit name: Ince Bank Saltmarsh North
 Broad habitat: Littoral Sediment
 Condition: Unfavourable - No change
 Reportable features:

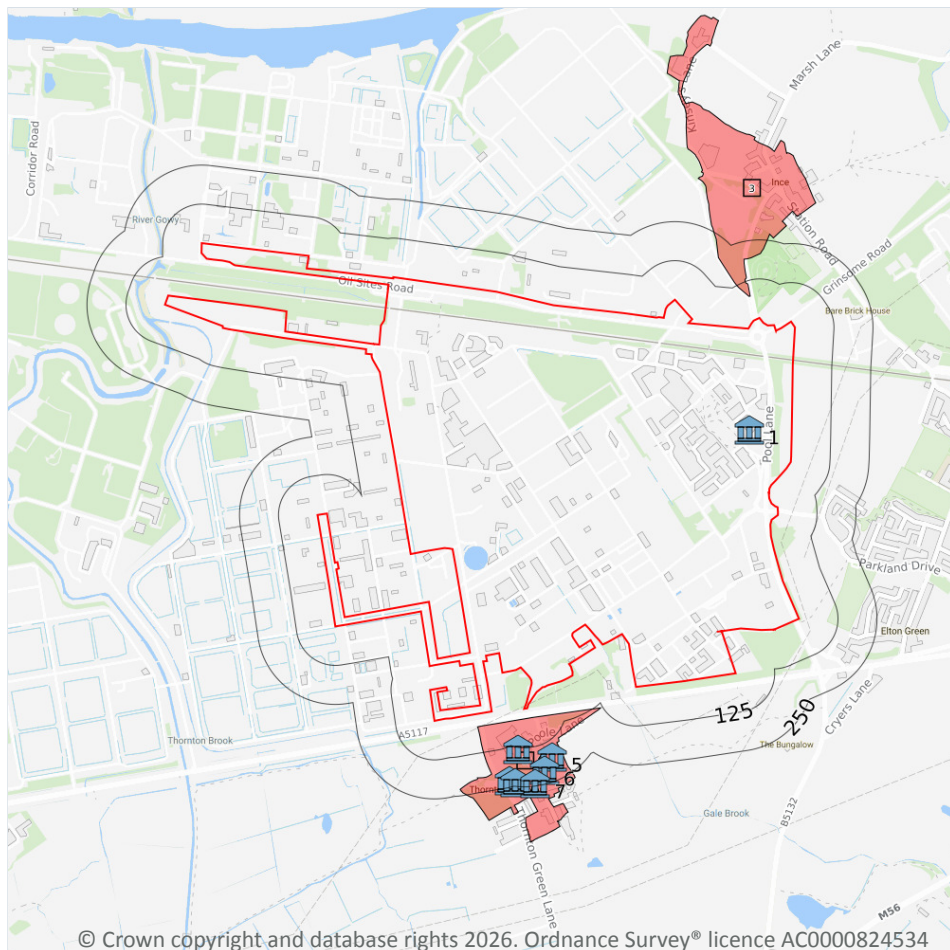


Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Curlew, Numenius arquata	Favourable	17/02/2020
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Favourable	17/02/2020
Aggregations of non-breeding birds - Golden plover, Pluvialis apricaria	Unfavourable - No change	17/02/2020
Aggregations of non-breeding birds - Pintail, Anas acuta	Unfavourable - No change	18/02/2020
Aggregations of non-breeding birds - Redshank, Tringa totanus	Favourable	24/02/2020
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Favourable	24/02/2020
Aggregations of non-breeding birds - Teal, Anas crecca	Unfavourable - No change	17/02/2020
Aggregations of non-breeding birds - Wigeon, Anas penelope	Unfavourable - No change	17/02/2020
Black-tailed godwit, Limosa limosa islandica - A616, nb	-	-
Dunlin, Calidris alpina alpina - A672, nb	-	-
Golden plover, Pluvialis apricaria - A140, nb	-	-
More than 20,000 Non-breeding waterbirds	Unfavourable - Recovering	17/02/2020
Pintail, Anas acuta - A054, nb	-	-
Redshank, Tringa totanus - A162, nb	-	-
SM4-28 - Saltmarsh	Unfavourable - Recovering	12/10/2010
Shelduck, Tadorna tadorna - A048, nb	-	-
Teal, Anas crecca - A704, nb	-	-
Waterbird assemblage	-	-

This data is sourced from Natural England and Natural Resources Wales.



11 Visual and cultural designations



- Site Outline
- Search buffers in metres (m)
- Listed buildings
- Conservation areas
- Conservation areas - no data
- National Parks
- Areas of Outstanding Natural Beauty
- Registered parks and gardens
- Scheduled Monuments
- World Heritage Sites

11.1 World Heritage Sites

Records within 250m

0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.2 Area of Outstanding Natural Beauty

Records within 250m

0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.3 National Parks

Records within 250m

0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.

11.4 Listed Buildings

Records within 250m

7

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.

Features are displayed on the Visual and cultural designations map on [page 330 >](#)

ID	Location	Name	Grade	Reference Number	Listed date
1	On site	Building 50 At Thornton Aero Engine Research Laboratory	II	1392326	05/12/2007
4	130m S	Church Farmhouse Including Cottage Wing To West	II	1330241	17/06/1982
5	173m SE	Barn To North East Of Thornton Hall	II	1130654	17/06/1982
6	206m S	Thornton Hall	II	1130653	17/06/1982
A	229m S	Church Of St Mary	I	1330242	01/06/1967

ID	Location	Name	Grade	Reference Number	Listed date
A	239m S	Table Tomb To John Davies Of Dunham, South East Of Church Of St Mary	II	1145887	20/12/1983
7	243m S	Glebe Farmhouse	II	1130652	23/11/1981

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.5 Conservation Areas

Records within 250m

2

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

Features are displayed on the Visual and cultural designations map on [page 330 >](#)

ID	Location	Name	District	Date of designation
2	32m S	Thornton-le-Moors	Cheshire West and Chester	14/10/1981
3	76m NW	Ince	Cheshire West and Chester	04/12/1969

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.6 Scheduled Ancient Monuments

Records within 250m

0

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.



11.7 Registered Parks and Gardens

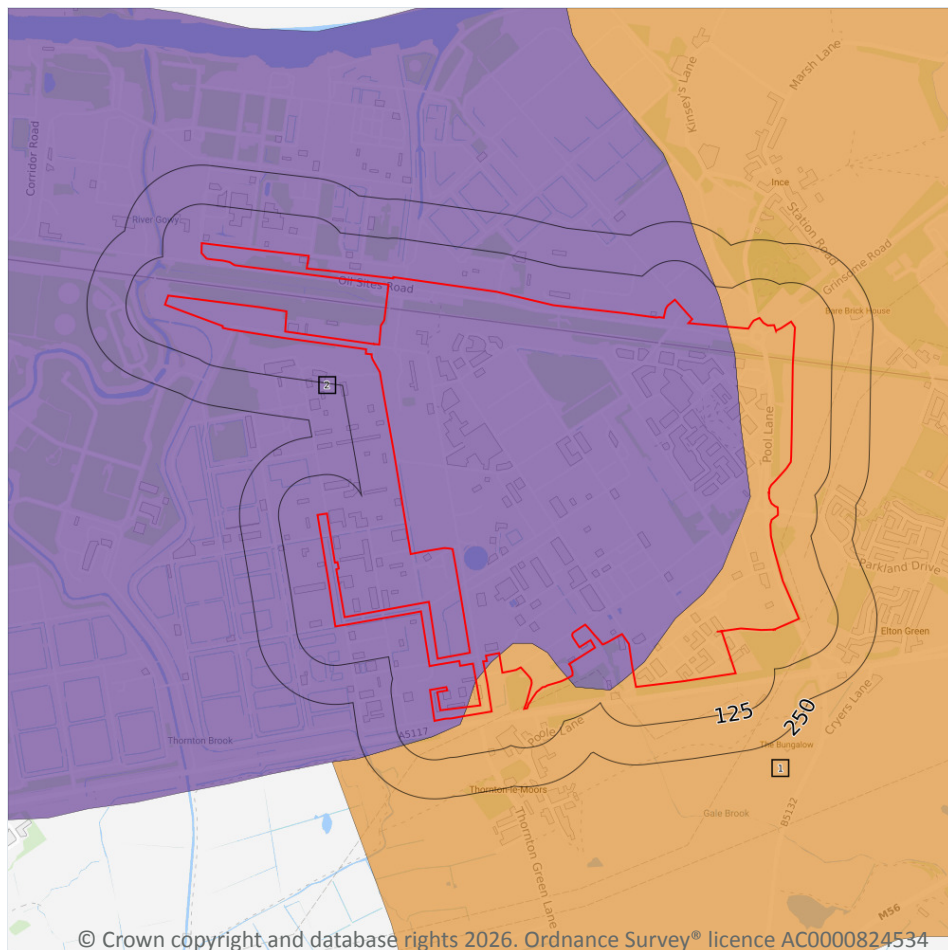
Records within 250m**0**

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.



12 Agricultural designations



- Site Outline
- Search buffers in metres (m)
- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

12.1 Agricultural Land Classification

Records within 250m

2

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on [page 334](#) >

ID	Location	Classification	Description
1	On site	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.
2	On site	Urban	Non-agricultural/no quality assigned



This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m

0

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

This data is sourced from Natural England and Natural Resources Wales.

12.3 Tree Felling Licences

Records within 250m

0

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m

3

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

Location	Reference	Scheme	Start Date	End date
46m S	AG00351970	Entry Level plus Higher Level Stewardship	01/03/2012	28/02/2023
237m S	AG00351970	Entry Level plus Higher Level Stewardship	01/03/2012	28/02/2023
243m SW	AG00351970	Entry Level plus Higher Level Stewardship	01/03/2012	28/02/2023

This data is sourced from Natural England.



12.5 Countryside Stewardship Schemes

Records within 250m

6

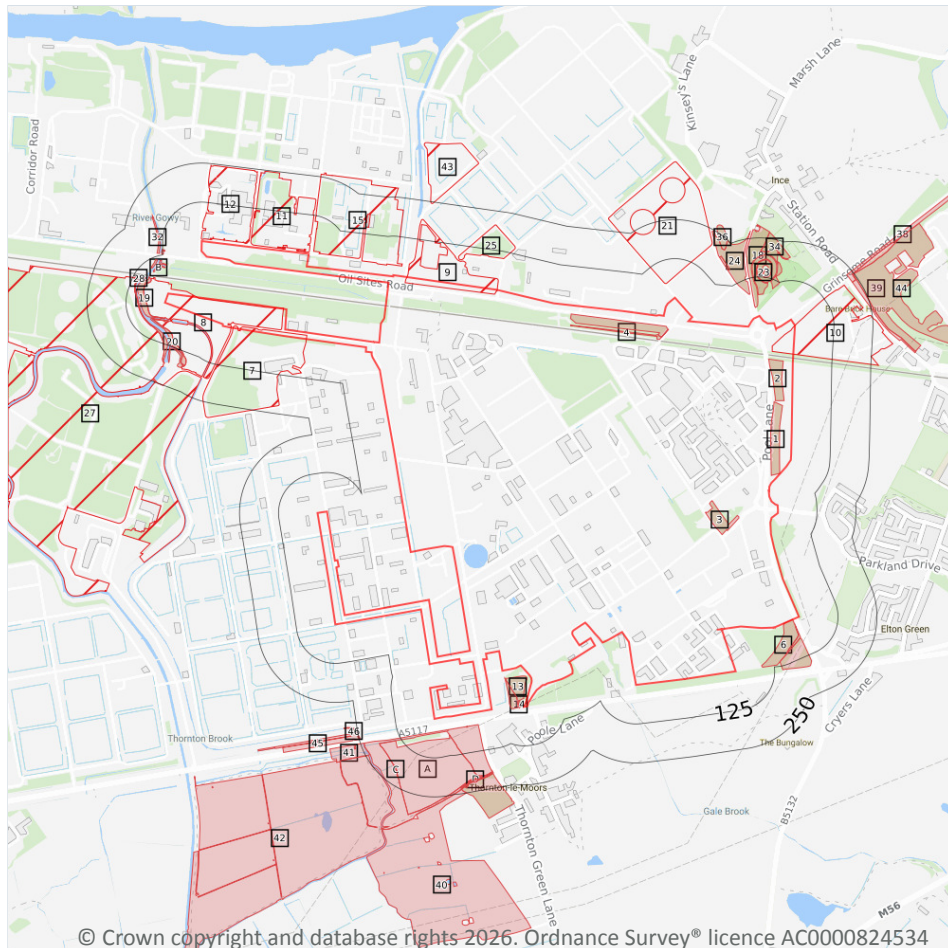
Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

Location	Reference	Scheme	Start Date	End Date
On site	823002	Countryside Stewardship (Middle Tier)	01/01/2020	31/12/2024
On site	1053565	Countryside Stewardship (Middle Tier)	01/01/2021	31/12/2025
45m S	1649221	Countryside Stewardship (Middle Tier)	01/01/2024	31/12/2028
236m S	1649221	Countryside Stewardship (Middle Tier)	01/01/2024	31/12/2028
242m SW	1649221	Countryside Stewardship (Middle Tier)	01/01/2024	31/12/2028
245m NE	1053565	Countryside Stewardship (Middle Tier)	01/01/2021	31/12/2025

This data is sourced from Natural England.



13 Habitat designations



- Site Outline
- Search buffers in metres (m)
- Priority Habitat Inventory
- Open Mosaic Habitat
- Limestone Pavement Orders
- Habitat Networks
- Primary Habitat
- Restorable Habitat
- Associated Habitats
- Habitat Restoration-Creation
- Network Enhancement Zone 1
- Network Enhancement Zone 2

13.1 Priority Habitat Inventory

Records within 250m

44

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

Features are displayed on the Habitat designations map on [page 337](#) >

ID	Location	Main Habitat	Other habitats
1	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)



ID	Location	Main Habitat	Other habitats
5	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
6	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
13	10m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
14	13m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
16	19m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
17	21m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
18	30m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	40m S	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
19	47m S	Mudflats	Main habitat: MUDDL (INV > 50%)
20	51m S	Mudflats	Main habitat: MUDDL (INV > 50%)
A	59m S	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
22	64m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
23	68m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
24	76m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
26	82m SW	Mudflats	Main habitat: MUDDL (INV > 50%)
B	83m NW	Mudflats	Main habitat: MUDDL (INV > 50%)
28	88m NW	Mudflats	Main habitat: MUDDL (INV > 50%)
B	91m N	Mudflats	Main habitat: MUDDL (INV > 50%)
B	97m NW	Mudflats	Main habitat: MUDDL (INV > 50%)
29	97m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
30	117m W	Mudflats	Main habitat: MUDDL (INV > 50%)
31	124m S	Mudflats	Main habitat: MUDDL (INV > 50%)
32	132m N	Mudflats	Main habitat: MUDDL (INV > 50%)
33	174m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
34	194m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
C	197m SW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
D	198m S	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
D	202m S	Deciduous woodland	Main habitat: CFPGM (INV > 50%); DWOOD (INV > 50%)



ID	Location	Main Habitat	Other habitats
35	203m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
C	212m SW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
36	218m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
37	224m S	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%); DWOOD (INV > 50%)
38	229m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%); Additional: CFPGM (INV 50%)
39	230m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
40	236m S	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
41	236m SW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
42	242m SW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
44	245m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
45	246m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
46	247m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m

0

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m

11

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

Features are displayed on the Habitat designations map on [page 337 >](#)



ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
7	On site	NLUD Ref: 62000042	Low	National Land Use Database - Previously Developed Land	UK Perspectives Aerial Photography	-
8	On site	NLUD Ref: 62000042	Low	National Land Use Database - Previously Developed Land	UK Perspectives Aerial Photography	-
9	On site	NLUD Ref: 62000042	Low	National Land Use Database - Previously Developed Land	UK Perspectives Aerial Photography	-
10	On site	NLUD Ref: 62000027	Low	National Land Use Database - Previously Developed Land	UK Perspectives Aerial Photography	-
11	5m N	NLUD Ref: 62000042	Low	National Land Use Database - Previously Developed Land	UK Perspectives Aerial Photography	-
12	6m N	NLUD Ref: 62000042	Low	National Land Use Database - Previously Developed Land	UK Perspectives Aerial Photography	-
15	18m NE	NLUD Ref: 62000042	Low	National Land Use Database - Previously Developed Land	UK Perspectives Aerial Photography	-
21	53m NW	NLUD Ref: 62000042	Low	National Land Use Database - Previously Developed Land	UK Perspectives Aerial Photography	-
25	79m N	NLUD Ref: 62000042	Low	National Land Use Database - Previously Developed Land	UK Perspectives Aerial Photography	-
27	84m SW	NLUD Ref: 62000042	Low	National Land Use Database - Previously Developed Land	UK Perspectives Aerial Photography	-
43	245m N	NLUD Ref: 62000042	Low	National Land Use Database - Previously Developed Land	UK Perspectives Aerial Photography	-

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m

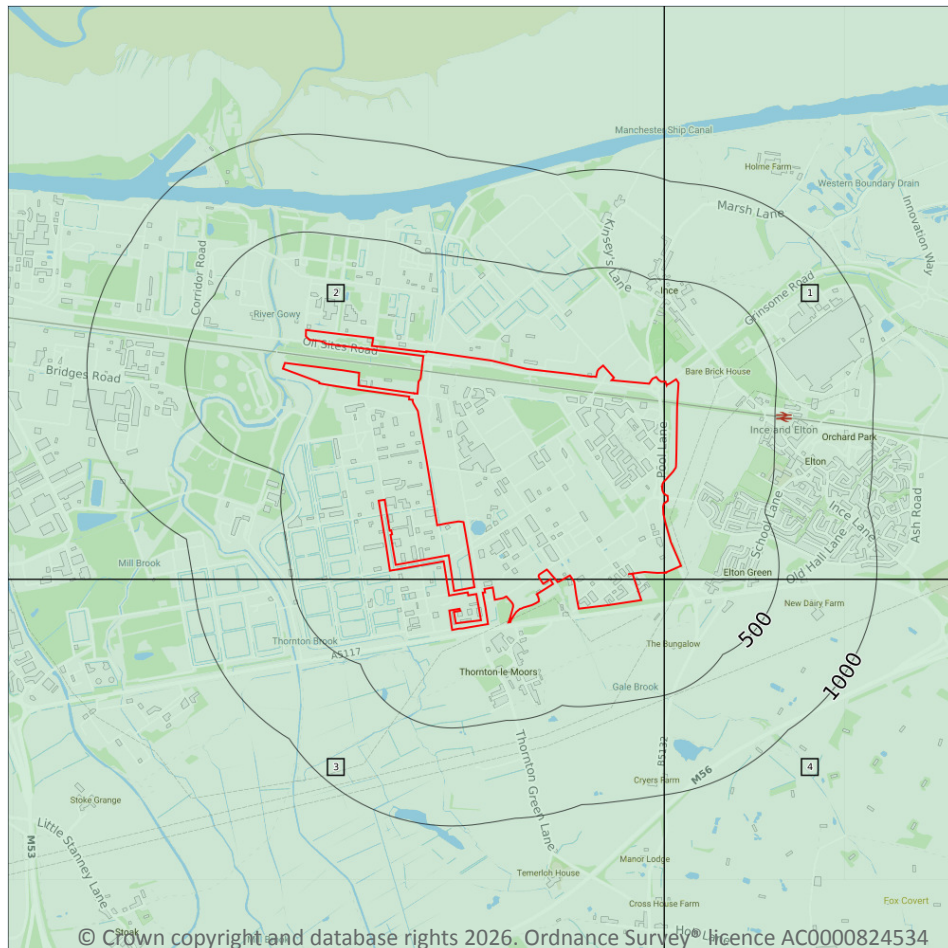
0

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.



14 Geology 1:10,000 scale - Availability



— Site Outline
Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

14.1 10k Availability

Records within 500m

4

An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on [page 341](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	Full	Full	No coverage	SJ47NE
2	On site	No coverage	Full	Full	No coverage	SJ47NW
3	On site	No coverage	Full	Full	No coverage	SJ47SW
4	33m S	No coverage	Full	Full	No coverage	SJ47SE



This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Artificial and made ground

14.2 Artificial and made ground (10k)

Records within 500m

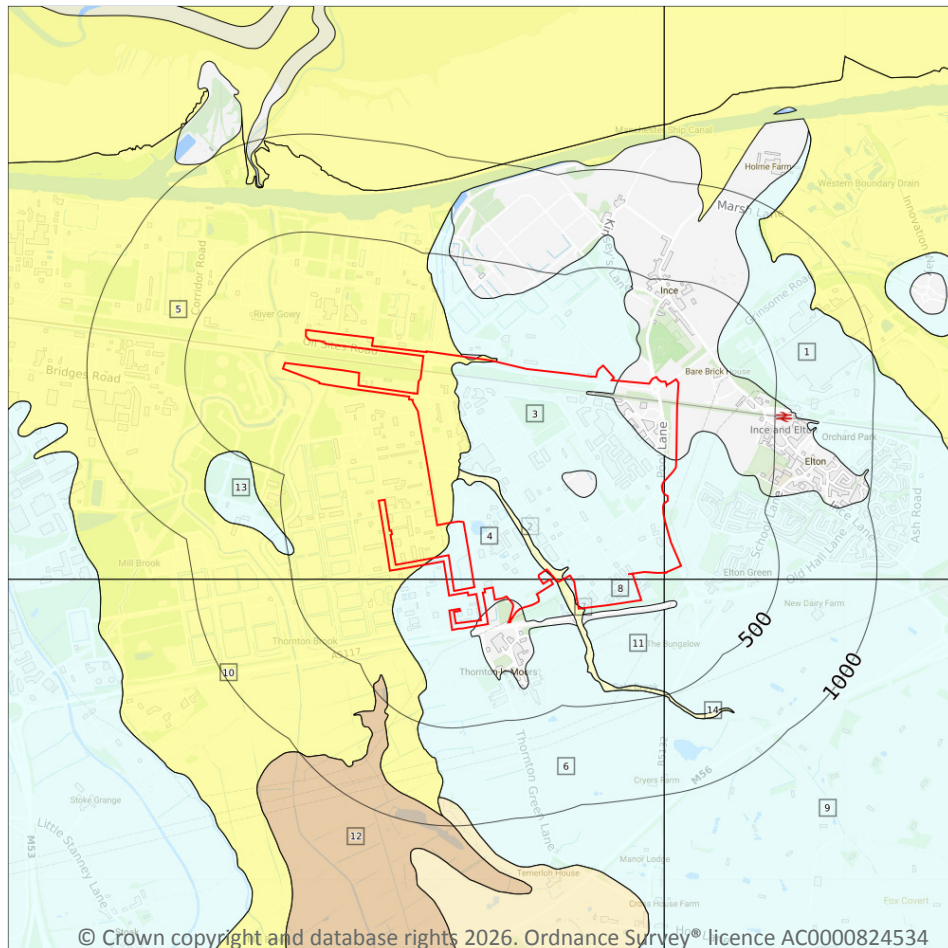
0

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (10k)

Superficial geology (10k)
Please see table for more details.

14.3 Superficial geology (10k)

Records within 500m

14

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:10,000 scale - Superficial map on [page 344](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	TILLD-DMTN	Till, Devensian-Diamicton	Diamicton
2	On site	ALV-XCZSV	Alluvium-Clay, Silt, Sand And Gravel	Clay, silt, sand and gravel
3	On site	TILLD-DMTN	Till, Devensian-Diamicton	Diamicton



ID	Location	LEX Code	Description	Rock description
4	On site	TILLD-DMTN	Till, Devensian-Diamicton	Diamicton
5	On site	TFD-XCZS	Tidal Flat Deposits-Clay, Silt And Sand	Clay, silt and sand
6	On site	TILLD-DMTN	Till, Devensian-Diamicton	Diamicton
7	On site	ALV-XCZSV	Alluvium-Clay, Silt, Sand And Gravel	Clay, silt, sand and gravel
8	On site	TILLD-DMTN	Till, Devensian-Diamicton	Diamicton
9	33m S	TILLD-DMTN	Till, Devensian-Diamicton	Diamicton
10	44m S	TFD-XCZS	Tidal Flat Deposits-Clay, Silt And Sand	Clay, silt and sand
11	60m S	TILLD-DMTN	Till, Devensian-Diamicton	Diamicton
12	428m SW	PEAT-P	Peat-Peat	Peat
13	469m W	TILLD-DMTN	Till, Devensian-Diamicton	Diamicton
14	481m S	ALV-XCZSV	Alluvium-Clay, Silt, Sand And Gravel	Clay, silt, sand and gravel

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m

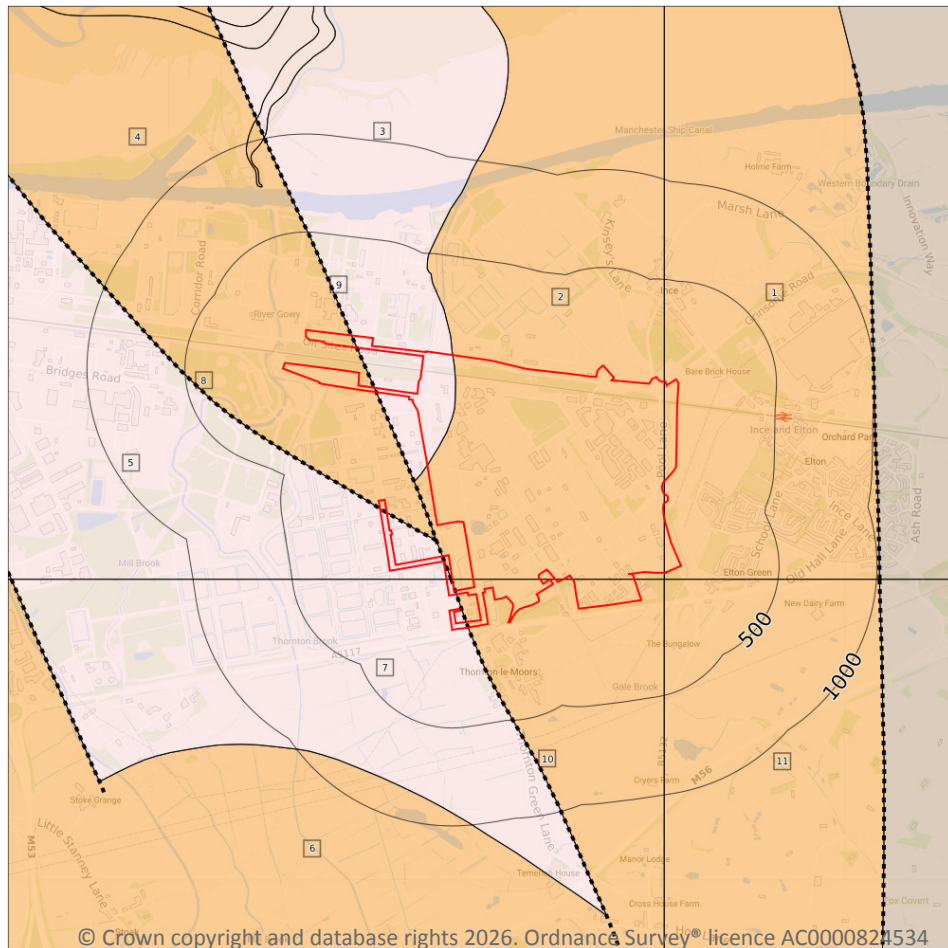
0

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

---- Bedrock faults and other linear features (10k)

Bedrock geology (10k)
Please see table for more details.

14.5 Bedrock geology (10k)

Records within 500m

8

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on [page 346 >](#)

ID	Location	LEX Code	Description	Rock age
1	On site	CHES-PESST	Chester Formation-Pebbly (Gravelly) Sandstone	Olenekian
2	On site	CHES-PESST	Chester Formation-Pebbly (Gravelly) Sandstone	Olenekian
3	On site	WLSF-SDST	Wilmslow Sandstone Formation-Sandstone	Olenekian
4	On site	CHES-PESST	Chester Formation-Pebbly (Gravelly) Sandstone	Olenekian



ID	Location	LEX Code	Description	Rock age
5	On site	WLSF-SDST	Wilmslow Sandstone Formation-Sandstone	Olenekian
6	On site	CHES-PESST	Chester Formation-Pebbly (Gravelly) Sandstone	Olenekian
7	On site	WLSF-SDST	Wilmslow Sandstone Formation-Sandstone	Olenekian
11	33m S	CHES-PESST	Chester Formation-Pebbly (Gravelly) Sandstone	Olenekian

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

3

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

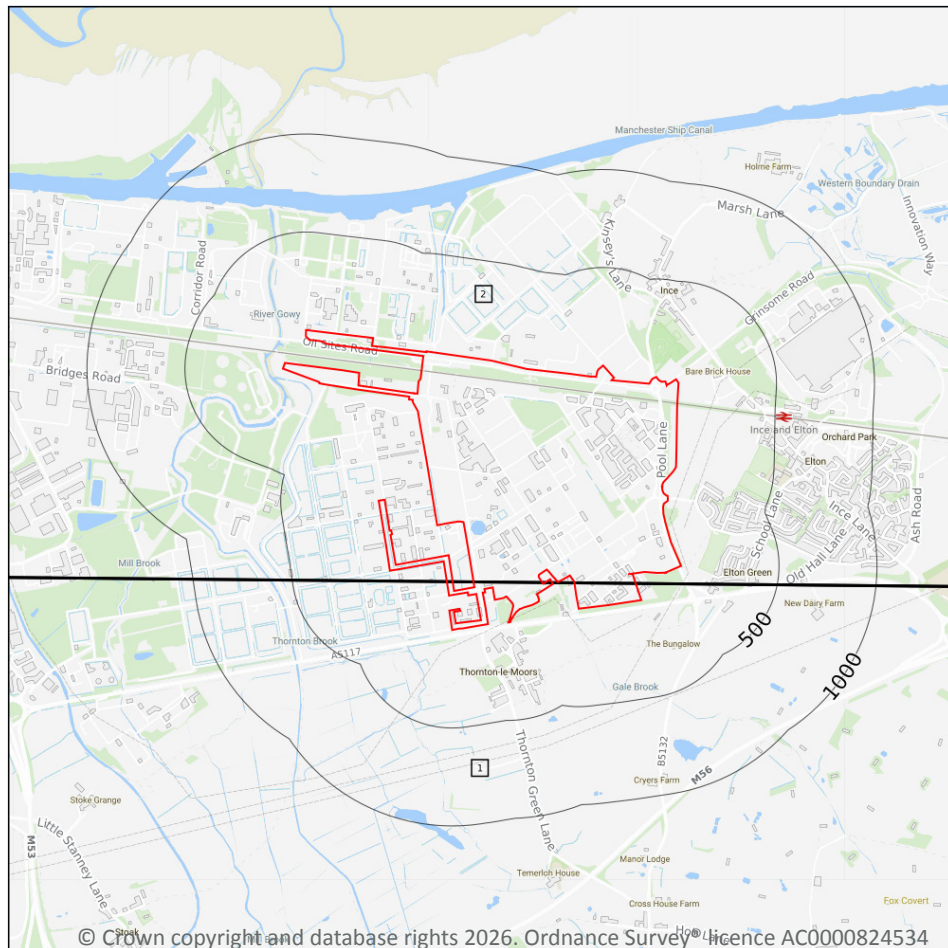
Features are displayed on the Geology 1:10,000 scale - Bedrock map on [page 346](#) >

ID	Location	Category	Description
8	On site	FAULT	Fault, inferred, displacement unknown
9	On site	FAULT	Fault, inferred, displacement unknown
10	On site	FAULT	Fault, inferred, displacement unknown

This data is sourced from the British Geological Survey.



15 Geology 1:50,000 scale - Availability



— Site Outline

Search buffers in metres (m)

□ Geological map tile

15.1 50k Availability

Records within 500m

2

An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on [page 348](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	Full	Full	No coverage	EW109_chester_v4
2	On site	No coverage	Full	Full	No coverage	EW097_runcorn_v4

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Artificial and made ground

15.2 Artificial and made ground (50k)

Records within 500m

0

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m

0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.



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Superficial geology (50k)
Please see table for more details.

350

ID	Location	LEX Code	Description	Rock description
4	On site	ALV-XCZSV	Alluvium	Clay, silt, sand and gravel
5	On site	TILLD-DMTN	Till, Devensian	Diamicton
6	53m S	TFD-XCZS	Tidal flat deposits	Clay, silt and sand
7	67m SE	TILLD-DMTN	Till, Devensian	Diamicton
8	424m SW	PEAT-P	Peat	Peat
9	473m SW	TILLD-DMTN	Till, Devensian	Diamicton

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	10
---------------------------	-----------

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Intergranular	High	Very Low
On site	Intergranular	High	Very Low
On site	Intergranular	Moderate	Very Low
On site	Mixed	High	Low
On site	Mixed	High	Low
On site	Mixed	High	Low
On site	Mixed	High	Low
33m S	Mixed	High	Low
43m S	Mixed	High	Low
44m S	Intergranular	Moderate	Very Low

This data is sourced from the British Geological Survey.



15.6 Landslip (50k)

Records within 500m

0

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

15.7 Landslip permeability (50k)

Records within 50m

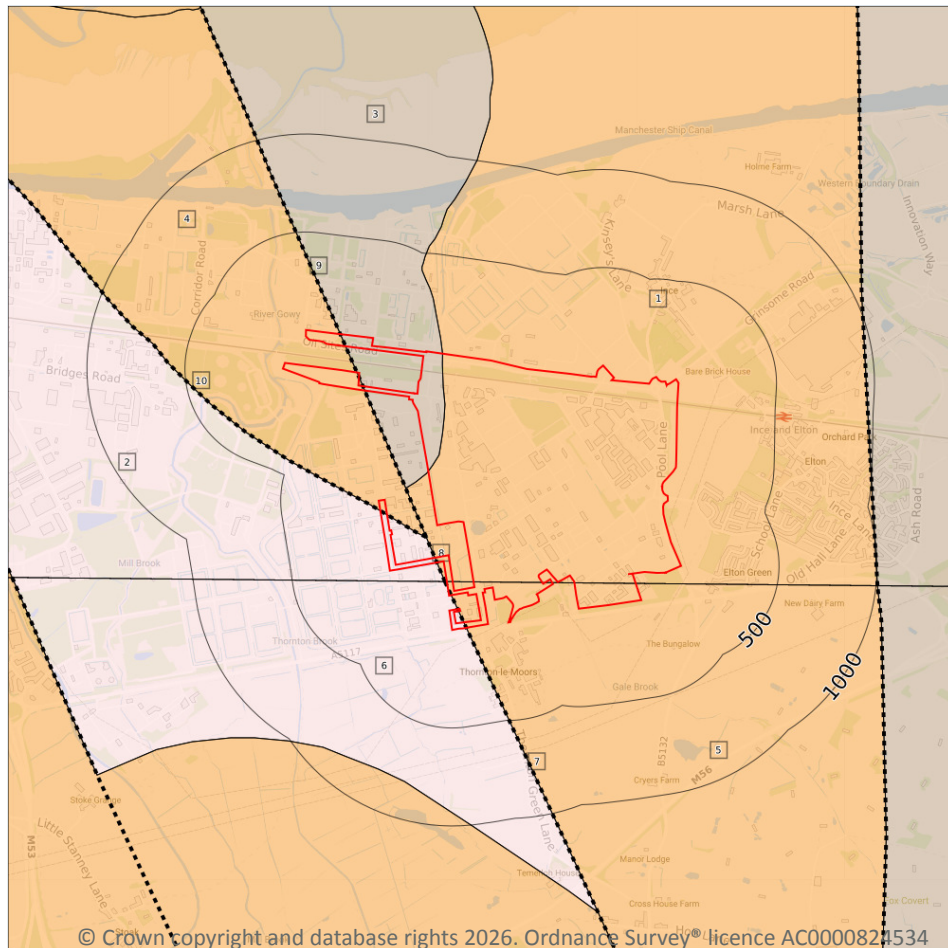
0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

.... Bedrock faults and other linear features (50k)

Bedrock geology (50k)
Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m

6

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on [page 353](#) >

ID	Location	LEX Code	Description	Rock age
1	On site	CHES-PESST	Chester Formation-Pebbly (gravelly) sandstone	Olenekian
2	On site	WLSF-SDST	Wilmslow Sandstone Formation-Sandstone	Olenekian
3	On site	KNSF-SDST	Kinnerton Sandstone Formation-Sandstone	Not Defined
4	On site	CHES-PESST	Chester Formation-Pebbly (gravelly) sandstone	Olenekian



ID	Location	LEX Code	Description	Rock age
5	On site	CHES-PESST	Chester Formation-Pebbly (gravelly) sandstone	Olenekian
6	On site	WLSF-SDST	Wilmslow Sandstone Formation-Sandstone	Olenekian

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	6
---------------------------	----------

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	High	Moderate
On site	Mixed	High	Moderate
On site	Mixed	High	Moderate
On site	Intergranular	High	High
On site	Intergranular	High	High
33m S	Mixed	High	Moderate

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m	4
----------------------------	----------

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on [page 353](#) >

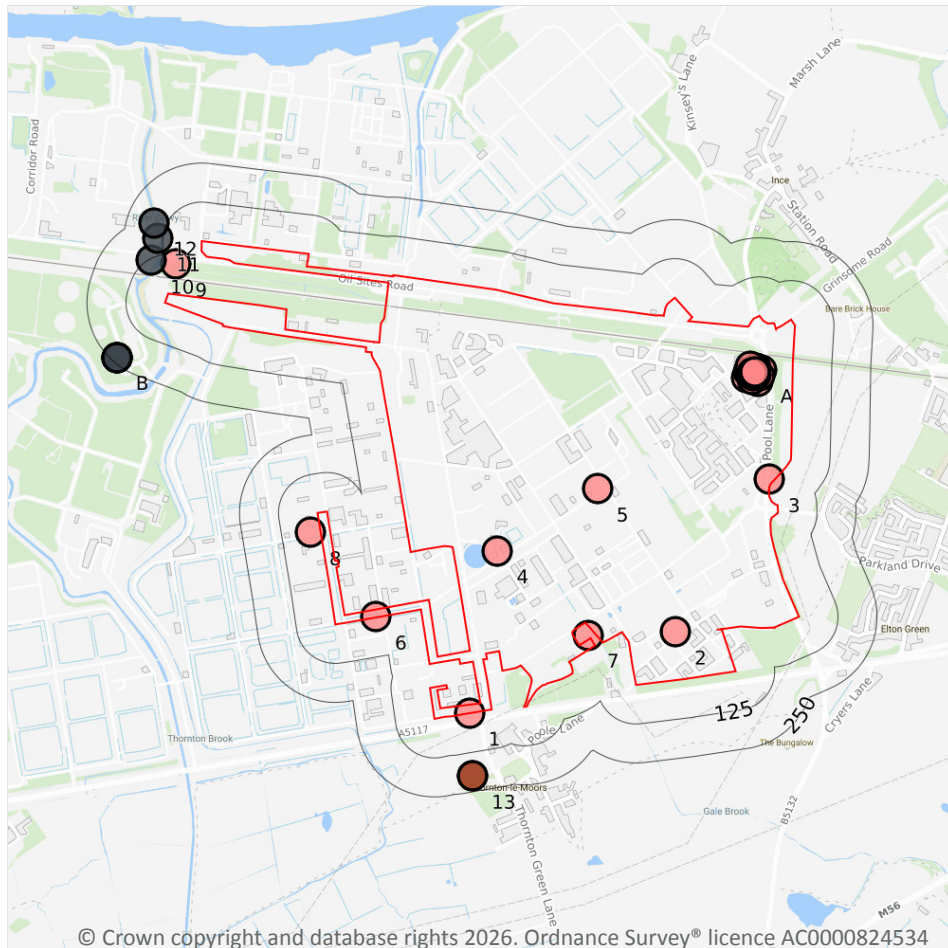
ID	Location	Category	Description
7	On site	FAULT	Fault, inferred, displacement unknown
8	On site	FAULT	Fault, inferred, crossmark on downthrow side, throw in metres
9	On site	FAULT	Fault, inferred, crossmark on downthrow side, throw in metres
10	On site	FAULT	Fault, inferred, crossmark on downthrow side, throw in metres



This data is sourced from the British Geological Survey.



16 Boreholes



— Site Outline
Search buffers in metres (m)

- Confidential
- 0 - 10m
- 10 - 30m
- 30m+
- Unknown

16.1 BGS Boreholes

Records within 250m

38

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

Features are displayed on the Boreholes map on [page 356](#) >

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	On site	344030 374760	SHELL 5	152.4	N	163585 ↗
2	On site	344690 375020	SHELL REFINING CO 6	152.4	N	163382 ↗
3	On site	344990 375510	SHELL REFINING CO 7	152.4	N	163383 ↗



ID	Location	Grid reference	Name	Length	Confidential	Web link
4	On site	344120 375280	SHELL REFINING CO 9	153.01	N	163376 ↗
5	On site	344440 375480	SHELL REFINING CO 8	142.1	N	163377 ↗
6	On site	343730 375070	SHELL REFINING CO 10	126.06	N	163375 ↗
A	On site	344965 375858	UKGEOS CHESHIRE TH0424	101.14	N	20956273 ↗
A	On site	344919 375836	UKGEOS CHESHIRE TH0404	100.0	N	21197607 ↗
A	On site	344953 375824	UKGEOS CHESHIRE TH0405	100.0	N	21197608 ↗
A	On site	344938 375835	UKGEOS CHESHIRE TH0406	100.0	N	21197609 ↗
A	On site	344925 375853	UKGEOS CHESHIRE TH0407	101.0	N	21197610 ↗
A	On site	344931 375851	UKGEOS CHESHIRE TH0408	100.0	N	21197611 ↗
A	On site	344936 375830	UKGEOS CHESHIRE TH0409	101.0	N	21197612 ↗
A	On site	344942 375847	UKGEOS CHESHIRE TH0410	100.0	N	21197613 ↗
A	On site	344948 375864	UKGEOS CHESHIRE TH0411	101.0	N	21197614 ↗
A	On site	344953 375843	UKGEOS CHESHIRE TH0412	100.0	N	21197615 ↗
A	On site	344959 375841	UKGEOS CHESHIRE TH0413	101.0	N	21197616 ↗
A	On site	344946 375858	UKGEOS CHESHIRE TH0414	100.0	N	21197619 ↗
A	On site	344931 375870	UKGEOS CHESHIRE TH0415	100.0	N	21197620 ↗
A	On site	344940 375841	UKGEOS CHESHIRE TH0416	100.0	N	21197621 ↗
A	On site	344948 375845	UKGEOS CHESHIRE TH0417	100.0	N	21197622 ↗
A	On site	344941 375844	UKGEOS CHESHIRE TH0418	100.0	N	21197623 ↗

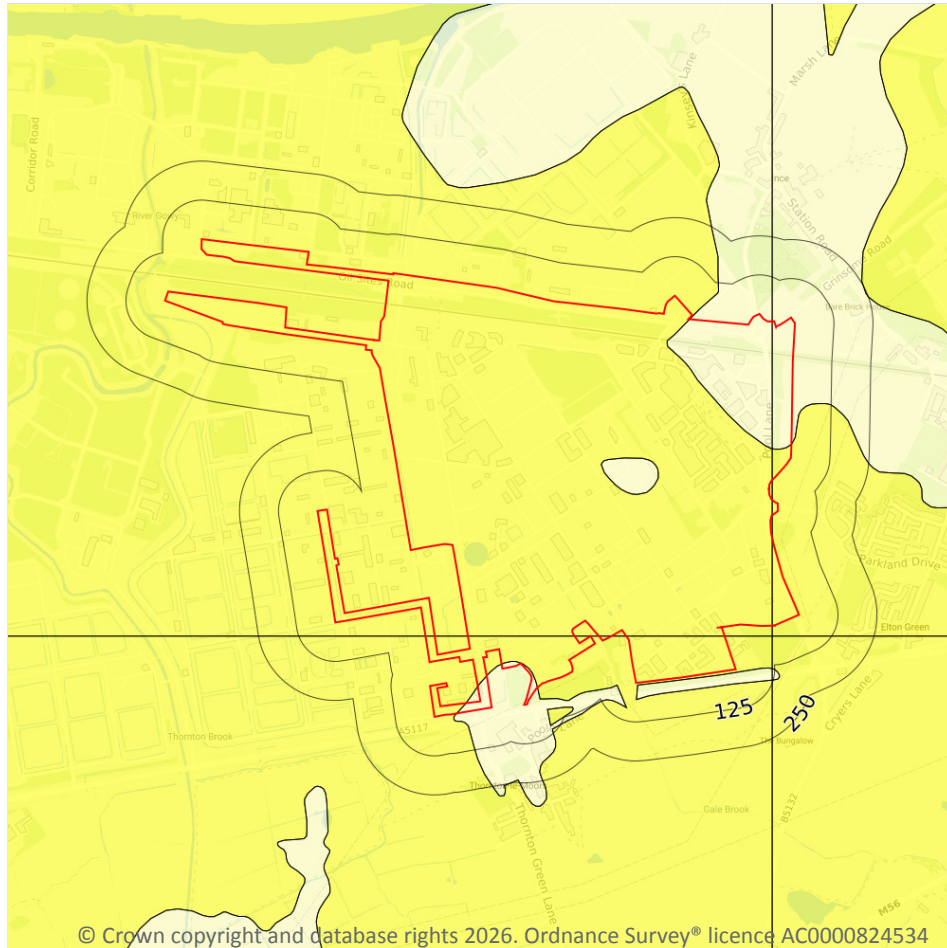


ID	Location	Grid reference	Name	Length	Confidential	Web link
A	On site	344945 375846	UKGEOS CHESHIRE TH0419	100.0	N	21197624 ↗
A	On site	344939 375848	UKGEOS CHESHIRE TH0420	100.0	N	21197625 ↗
A	On site	344943 375850	UKGEOS CHESHIRE TH0421	100.0	N	21197626 ↗
A	On site	344936 375849	UKGEOS CHESHIRE TH0422	100.0	N	21197627 ↗
A	On site	344944 375852	UKGEOS CHESHIRE TH0423	100.0	N	21197628 ↗
7	13m NW	344410 375010	SHELL REFINING CO 1	45.72	N	163378 ↗
8	33m W	343520 375340	SHELL REFINING CO 11	152.4	N	163374 ↗
9	91m SW	343090 376200	STANLOW	278.9	N	163392 ↗
10	119m NW	343010 376210	RIVER GOWY STANLOW 3	-	Y	N/A
11	142m W	343030 376280	RIVER GOWY STANLOW 2	-	Y	N/A
12	163m W	343020 376330	RIVER GOWY STANLOW 1	-	Y	N/A
13	198m S	344040 374560	SHELL REFINERIES NO.21	-1.0	N	163751 ↗
B	233m SW	342900 375900	NORTH DITCH PUMPING STN TP 1	-	Y	N/A
B	233m SW	342900 375900	NORTH DITCH PUMPING STN TP 2	-	Y	N/A
B	233m SW	342900 375900	NORTH DITCH PUMPING STN 1	-	Y	N/A
B	233m SW	342900 375900	NORTH DITCH PUMPING STN 2	-	Y	N/A

This data is sourced from the British Geological Survey.



17 Natural ground subsidence - Shrink swell clays



- Site Outline**
- Search buffers in metres (m)**
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.1 Shrink swell clays

Records within 50m

4

The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

Features are displayed on the Natural ground subsidence - Shrink swell clays map on [page 359](#) >

Location	Hazard rating	Details
On site	Negligible	Ground conditions predominantly non-plastic.
On site	Very low	Ground conditions predominantly low plasticity.
8m S	Negligible	Ground conditions predominantly non-plastic.

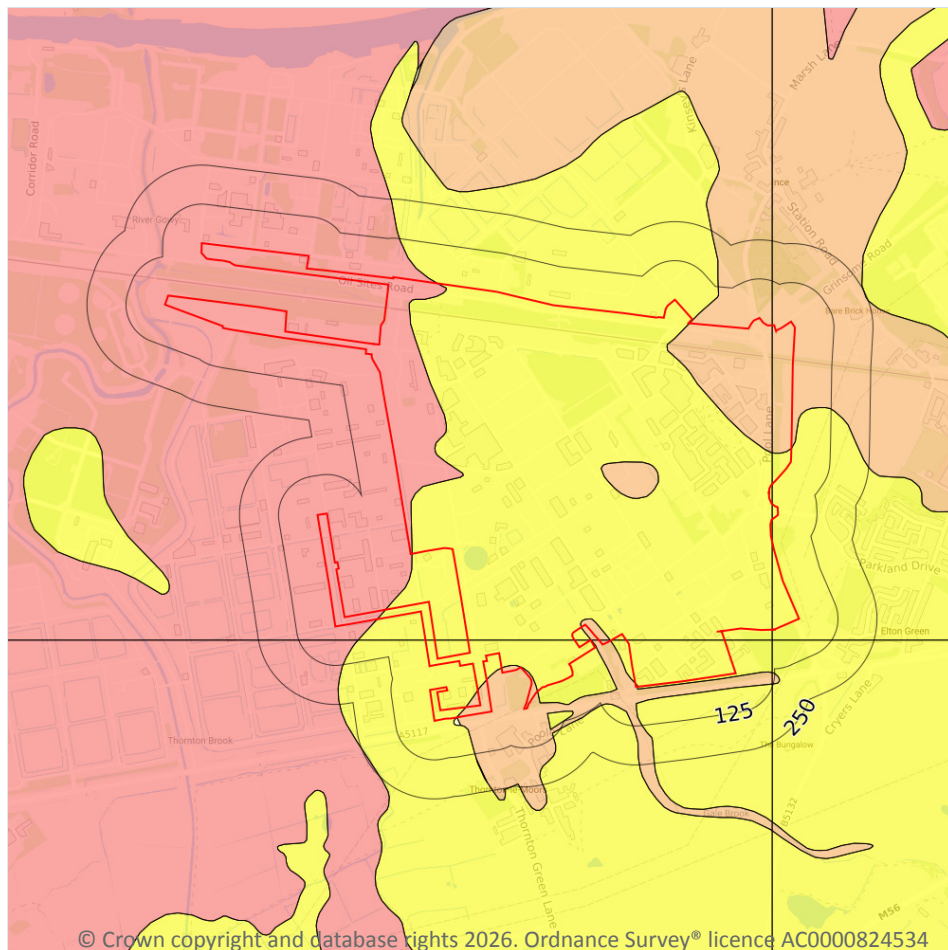


Location	Hazard rating	Details
33m S	Very low	Ground conditions predominantly low plasticity.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Running sands



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.2 Running sands

Records within 50m

7

The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on [page 361](#) >

Location	Hazard rating	Details
On site	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.

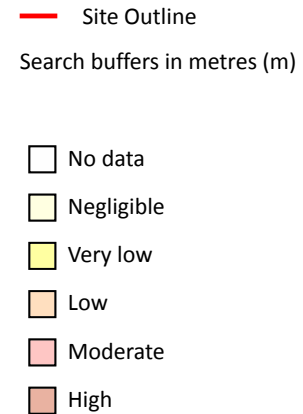
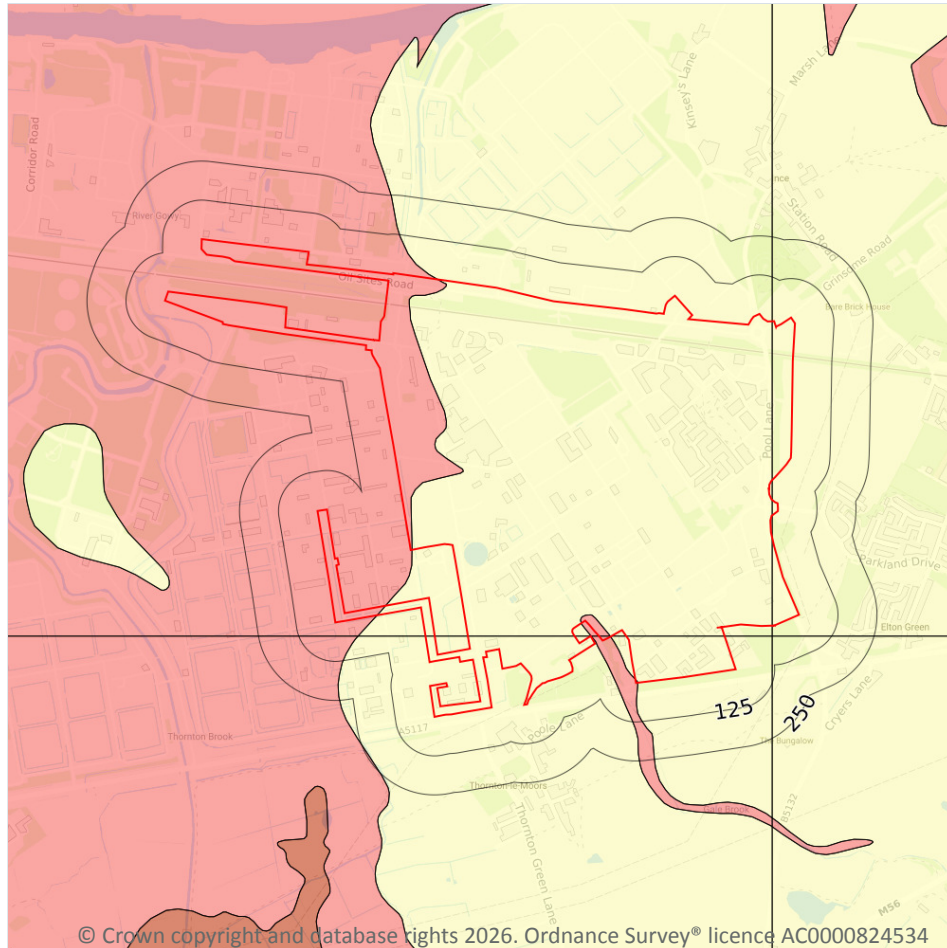


Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.
On site	Low	Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.
On site	Moderate	Running sand conditions are probably present. Constraints may apply to land uses involving excavation or the addition or removal of water.
33m S	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.
43m S	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.
44m S	Moderate	Running sand conditions are probably present. Constraints may apply to land uses involving excavation or the addition or removal of water.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



17.3 Compressible deposits

Records within 50m

4

The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on [page 363](#) >

Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.
On site	Moderate	Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.

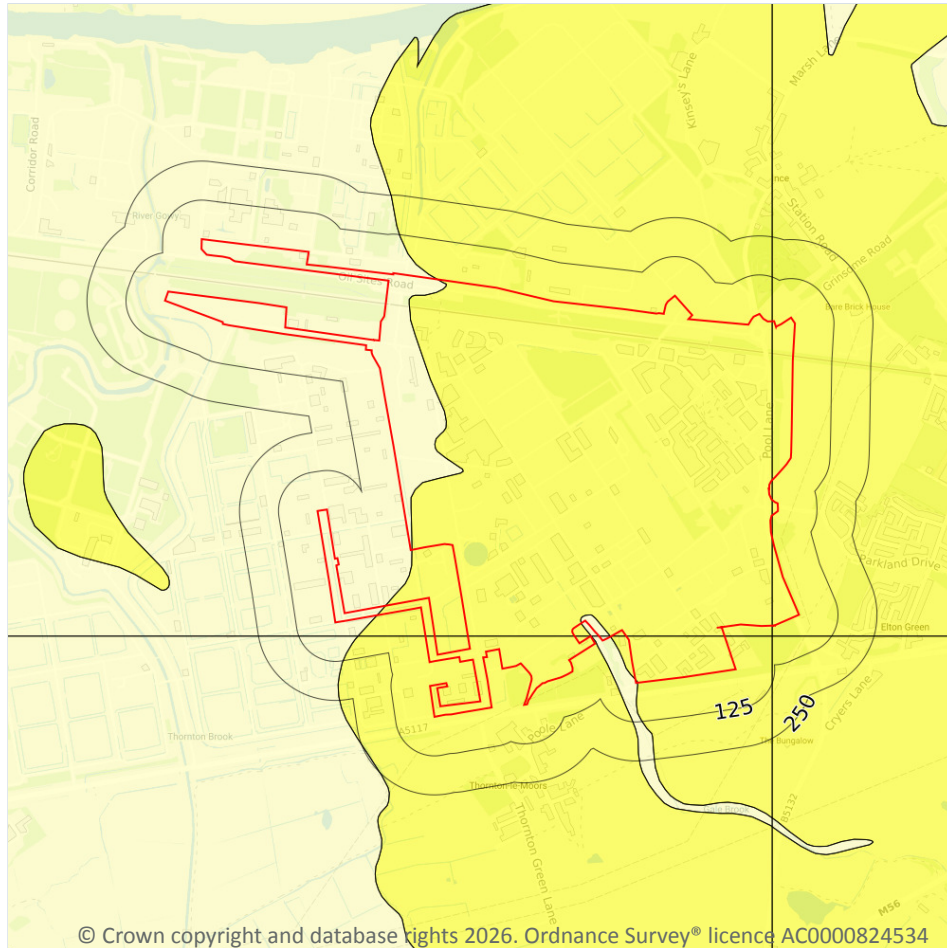


Location	Hazard rating	Details
33m S	Negligible	Compressible strata are not thought to occur.
44m S	Moderate	Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Collapsible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.4 Collapsible deposits

Records within 50m

4

The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on [page 365 >](#)

Location	Hazard rating	Details
On site	Negligible	Deposits with potential to collapse when loaded and saturated are believed not to be present.
On site	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.
33m S	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.



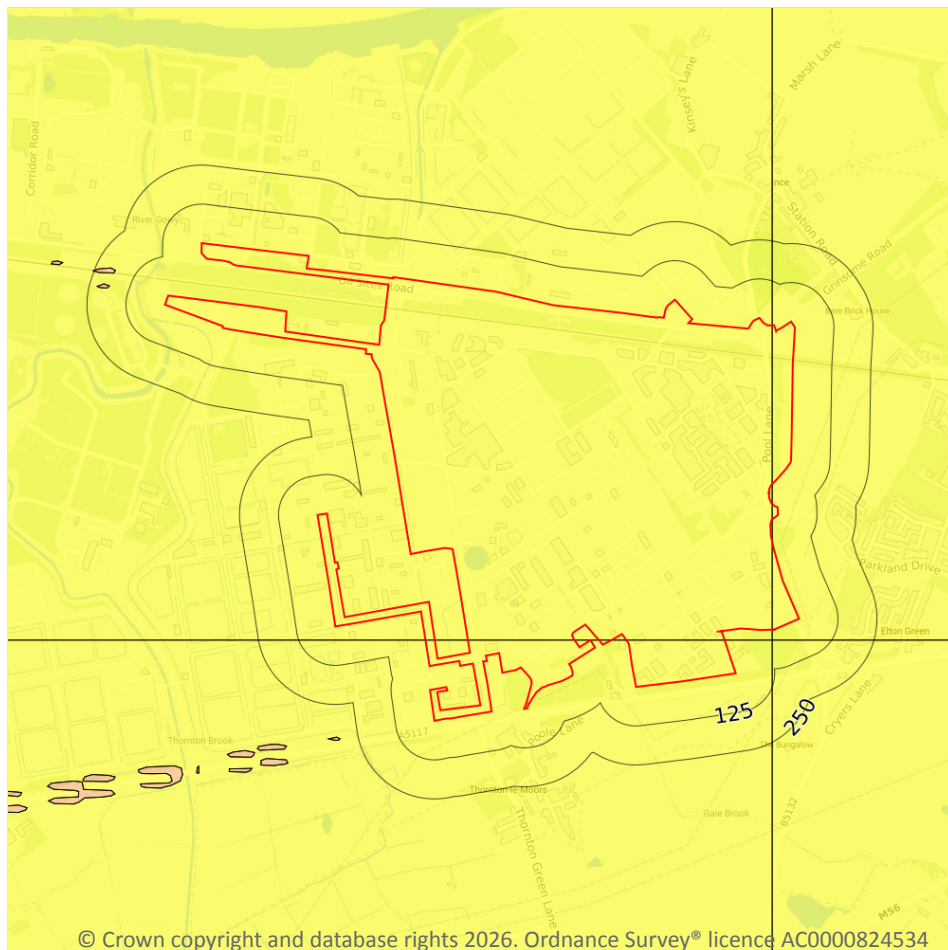
Location	Hazard rating	Details
----------	---------------	---------

44m S	Negligible	Deposits with potential to collapse when loaded and saturated are believed not to be present.
-------	------------	---

This data is sourced from the British Geological Survey.



Natural ground subsidence - Landslides



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☒ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.5 Landslides

Records within 50m

2

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on [page 367](#) >

Location	Hazard rating	Details
On site	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

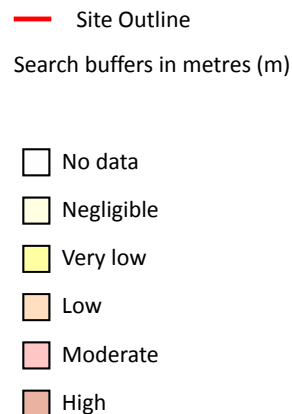
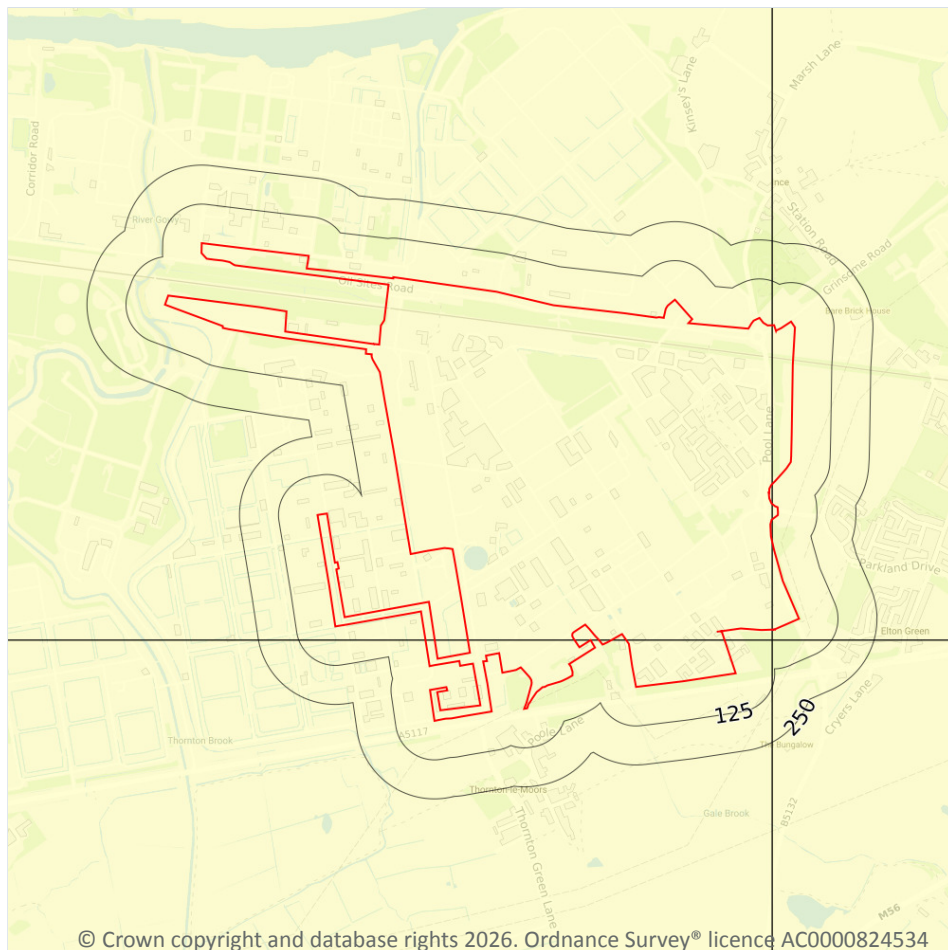


Location	Hazard rating	Details
33m S	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Ground dissolution of soluble rocks



17.6 Ground dissolution of soluble rocks

Records within 50m

2

The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on [page 369](#) >

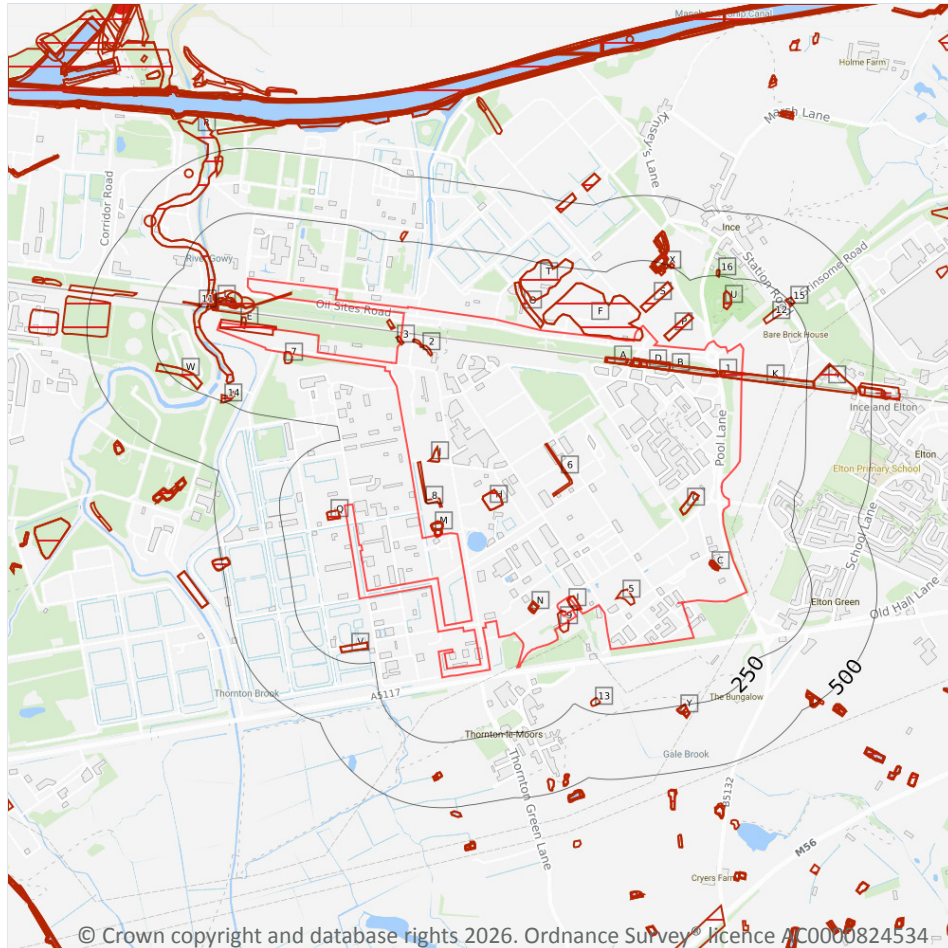
Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.

Location	Hazard rating	Details
33m S	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.

This data is sourced from the British Geological Survey.



18 Mining and ground workings



- Site Outline
- Search buffers in metres (m)
- BritPits
- ▢ Surface ground workings
- ▢ Underground workings
- ▢ Underground mining extents
- ▢ Historical mineral planning areas
- ▢ TCA non-coal mining
- Non Coal Mining
 - ▢ Sporadic underground mining of restricted extent possible
 - ▢ Localised small scale underground mining possible
 - ▢ Small scale mining possible
 - ▢ Underground mining known or likely within or in close proximity
 - ▢ Underground mining known within or in very close proximity

18.1 BritPits

Records within 500m

0

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

This data is sourced from the British Geological Survey.



18.2 Surface ground workings

Records within 250m

101

Historical land uses identified from Ordnance Survey® mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

Features are displayed on the Mining and ground workings map on [page 371](#) >

ID	Location	Land Use	Year of mapping	Mapping scale
1	On site	Cuttings	1953	1:10560
2	On site	Unspecified Heap	1953	1:10560
3	On site	Unspecified Heap	1953	1:10560
4	On site	Cuttings	1938	1:10560
5	On site	Unspecified Pit	1967	1:10560
6	On site	Unspecified Ground Workings	1967	1:10560
7	On site	Unspecified Pit	1967	1:10560
8	On site	Unspecified Ground Workings	1967	1:10560
9	On site	Unspecified Heaps	1967	1:10560
A	On site	Cuttings	1953	1:10560
A	On site	Cuttings	1908	1:10560
A	On site	Cuttings	1938	1:10560
A	On site	Cuttings	1938	1:10560
A	On site	Cuttings	1908	1:10560
B	On site	Cuttings	1953	1:10560
B	On site	Cuttings	1908	1:10560
B	On site	Cuttings	1897	1:10560
B	On site	Cuttings	1938	1:10560
C	On site	Pond	1953	1:10560
C	On site	Pond	1967	1:10560
C	On site	Pond	1908	1:10560
C	On site	Pond	1897	1:10560
C	On site	Pond	1938	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
C	On site	Pond	1908	1:10560
D	On site	Cuttings	1978	1:10000
D	On site	Cuttings	1990	1:10000
D	On site	Cuttings	1967	1:10560
E	On site	Unspecified Heap	1953	1:10560
E	On site	Ponds	1967	1:10560
F	On site	Unspecified Heaps	1978	1:10000
F	On site	Unspecified Heaps	1967	1:10560
G	On site	Unspecified Pit	1978	1:10000
G	On site	Cuttings	1990	1:10000
G	On site	Cuttings	1967	1:10560
H	On site	Unspecified Heap	1978	1:10000
H	On site	Unspecified Heap	1990	1:10000
H	On site	Unspecified Heap	1967	1:10560
I	On site	Unspecified Pit	1978	1:10000
I	On site	Unspecified Pit	1990	1:10000
I	On site	Unspecified Pit	1967	1:10560
J	On site	Unspecified Pit	1978	1:10000
J	On site	Unspecified Pit	1990	1:10000
K	On site	Cuttings	1949	1:10560
K	On site	Cuttings	1908	1:10560
K	On site	Cuttings	1897	1:10560
L	On site	Pond	1894	1:10560
M	On site	Pond	1912	1:10560
M	On site	Pond	1912	1:10560
M	On site	Ponds	1897	1:10560
M	On site	Ponds	1912	1:10560
M	On site	Ponds	1938	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
N	On site	Pond	1912	1:10560
N	On site	Pond	1897	1:10560
N	On site	Pond	1912	1:10560
N	On site	Pond	1938	1:10560
O	9m N	Unspecified Heap	1978	1:10000
O	9m N	Unspecified Heap	1967	1:10560
P	23m N	Cuttings	1978	1:10000
P	23m N	Cuttings	1990	1:10000
Q	26m W	Unspecified Pit	1978	1:10000
Q	26m W	Unspecified Pit	1990	1:10000
10	28m W	Unspecified Heap	1953	1:10560
L	29m SW	Unspecified Old Wharf	1938	1:10560
L	43m SW	Unspecified Old Wharf	1912	1:10560
L	48m N	Unspecified Old Wharf	1929	1:10560
L	51m N	Unspecified Old Wharf	1913	1:10560
L	51m N	Unspecified Old Wharf	1913	1:10560
R	54m SW	Pool	1912	1:10560
R	54m SW	Pool	1897	1:10560
S	54m N	Cuttings	1978	1:10000
S	54m N	Cuttings	1990	1:10000
L	55m NW	Unspecified Wharf	1894	1:10560
L	68m N	Unspecified Old Wharf	1912	1:10560
L	68m N	Unspecified Old Wharf	1912	1:10560
11	96m NW	Unspecified Old Wharf	1897	1:10560
T	106m N	Unspecified Heaps	1978	1:10000
T	106m N	Unspecified Heaps	1967	1:10560
12	127m NE	Cuttings	1990	1:10000
U	132m NE	Unspecified Heap	1968	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
U	132m NE	Unspecified Heap	1990	1:10000
V	171m S	Unspecified Pit	1983	1:10000
V	171m S	Unspecified Pit	1967	1:10560
W	192m SW	Cuttings	1978	1:10000
W	192m SW	Cuttings	1990	1:10000
13	195m S	Pond	1967	1:10560
14	202m S	Pond	1967	1:10560
X	206m N	Ponds	1894	1:10560
X	206m N	Ponds	1929	1:10560
X	208m N	Fish Pond	1894	1:10560
X	211m N	Fish Pond	1929	1:10560
X	215m N	Fish Pond	1913	1:10560
X	220m N	Fish Pond	1938	1:10560
X	221m N	Fish Pond	1908	1:10560
X	225m N	Fish Pond	1953	1:10560
X	227m N	Pond	1908	1:10560
X	227m N	Fish Pond	1897	1:10560
X	229m N	Pond	1967	1:10560
15	242m NE	Cuttings	1990	1:10000
16	247m N	Unspecified Quarry	1953	1:10560
Y	248m S	Ponds	1908	1:10560
Y	248m S	Pond	1938	1:10560

This data is sourced from Ordnance Survey®/Groundsure.

18.3 Underground workings

Records within 1000m

0

Historical land uses identified from Ordnance Survey® mapping that indicate the presence of underground workings e.g. mine shafts.

This data is sourced from Ordnance Survey®/Groundsure.



18.4 Underground mining extents

Records within 500m**0**

This data identifies underground mine workings that could present a potential risk, including adits and seam workings. These features have been identified from BGS Geological mapping and mine plans sourced from the BGS and various collections and sources.

This data is sourced from Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m**0**

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m**0**

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site**0**

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m**0**

This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the



Coal Authority and permission should be sought from Groundsure prior to any re-use.

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m

0

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m

0

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m

0

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.12 Coal mining

Records on site

0

Areas which could be affected by past, current or future coal mining.

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site	0
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The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

18.14 Gypsum areas

Records on site	0
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Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0
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Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

Records on site	0
-----------------	---

Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).

19 Ground cavities and sinkholes

19.1 Natural cavities

Records within 500m

0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Stantec UK Ltd.

19.2 Mining cavities

Records within 1000m

0

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m

0

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m

0

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey® maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

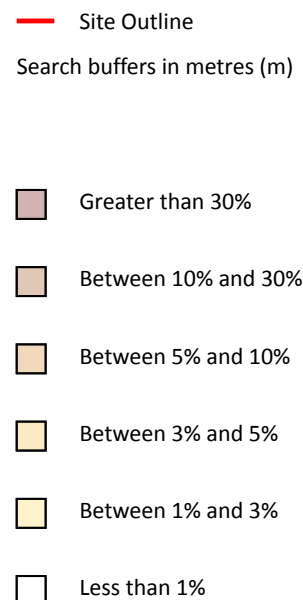
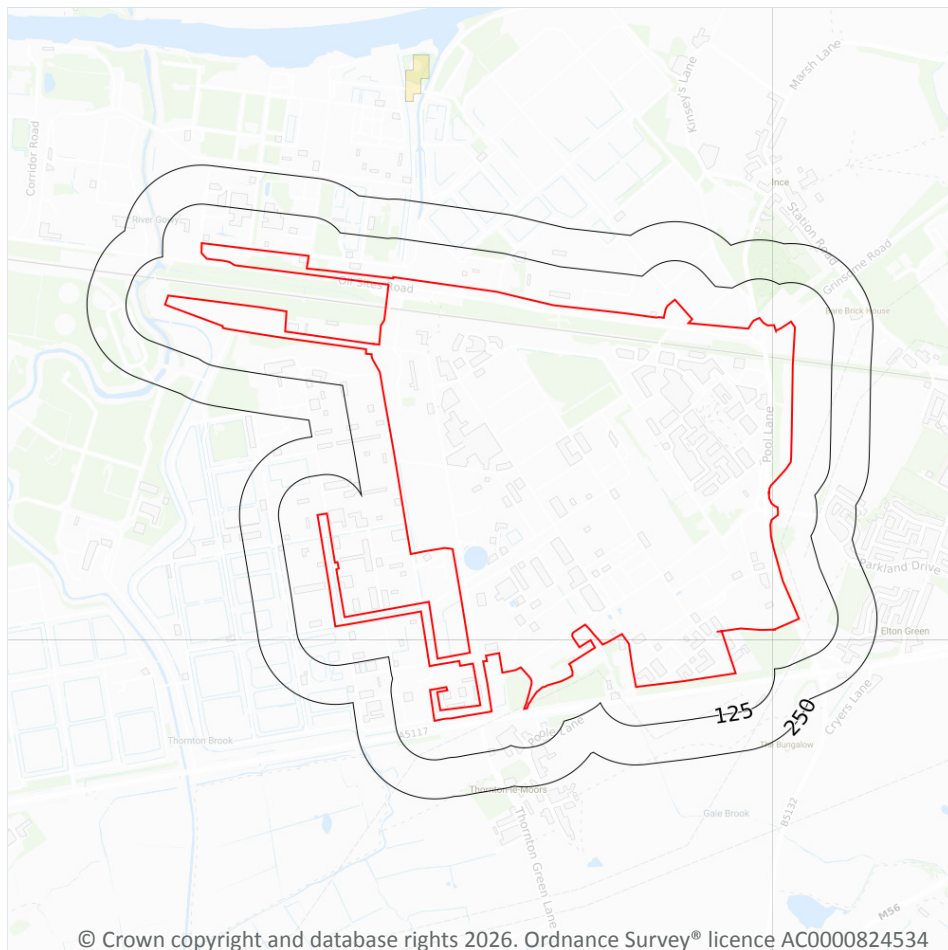
Not all 'holes' noted on Ordnance Survey® mapping will necessarily be present within this dataset.



This data is sourced from Groundsure.



20 Radon



20.1 Radon

Records on site

1

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on [page 381](#) >

Location	Estimated properties affected	Radon Protection Measures required
On site	Less than 1%	None



This data is sourced from the British Geological Survey and UK Health Security Agency.



21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m

88

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km². In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km²; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg



Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg



Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
3m S	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
8m S	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
10m W	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
13m N	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg



Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
20m SE	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
23m S	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
23m S	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
25m W	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
27m S	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
27m S	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
27m S	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
33m S	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
33m S	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
35m N	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
43m S	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
43m W	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
44m S	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
46m W	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m

0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km²).

This data is sourced from the British Geological Survey.

21.3 BGS Measured Urban Soil Chemistry

Records within 50m

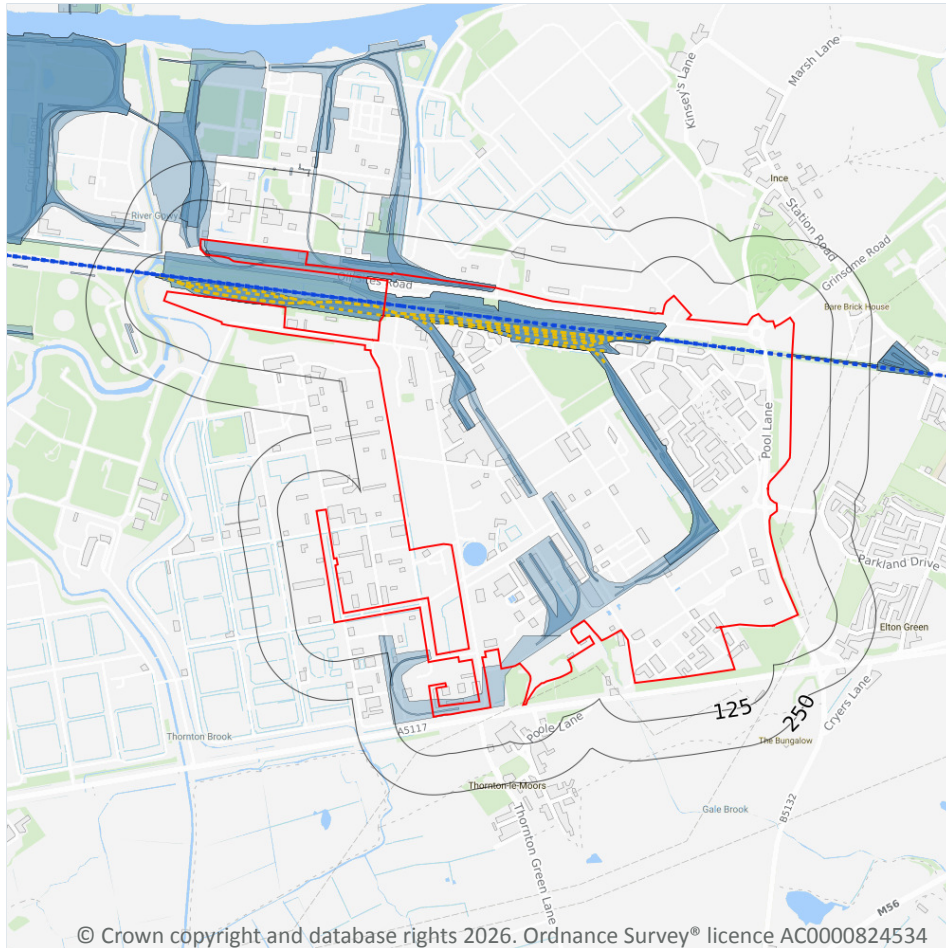
0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km².

This data is sourced from the British Geological Survey.



22 Railway infrastructure and projects



22.1 Underground railways (London)

Records within 250m

0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m

0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.



This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m

0

Railway tunnels taken from contemporary Ordnance Survey® mapping.

This data is sourced from the Ordnance Survey®.

22.4 Historical railway and tunnel features

Records within 250m

45

Railways and tunnels digitised from historical Ordnance Survey® mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

Features are displayed on the Railway infrastructure and projects map on [page 387](#) >

Location	Land Use	Year of mapping	Mapping scale
On site	Railway Sidings	1978	10000
On site	Railway Sidings	1990	10000
On site	Mineral Railway Sidings	1967	10560
On site	Railway Sidings	1910	2500
On site	Railway Sidings	1898	2500
On site	Railway Sidings	1873	2500
On site	Mineral Railway Sidings	1987	1250
On site	Mineral Railway Sidings	1959	2500
On site	Mineral Railway Sidings	1968	1250
On site	Mineral Railway Sidings	1965	2500
On site	Mineral Railway Sidings	1958	1250
On site	Mineral Railway Sidings	1959	1250
On site	Mineral Railway Sidings	1960	2500
On site	Mineral Railway Sidings	1983	1250
On site	Railway Sidings	1983	1250
On site	Railway Sidings	1959	1250
On site	Railway Sidings	1993	1250



Location	Land Use	Year of mapping	Mapping scale
On site	Railway Sidings	1980	1250
On site	Railway Sidings	1986	1250
On site	Railway Sidings	1970	1250
On site	Railway Sidings	1968	1250
On site	Railway Sidings	1960	2500
On site	Railway Sidings	1965	2500
On site	Railway Sidings	1963	2500
On site	Railway Sidings	1987	1250
On site	Railway Sidings	1990	1250
On site	Railway Sidings		-
On site	Mineral Railway Sidings	1978	-
On site	Railway Sidings	1978	-
14m N	Mineral Railway Sidings	1959	1250
22m S	Railway Sidings	1978	-
33m W	Mineral Railway Sidings	1959	1250
39m N	Railway Sidings	1978	10000
39m N	Railway Sidings	1990	10000
59m NW	Railway Sidings	1978	-
131m SW	Railway Sidings	1993	1250
139m SW	Railway Sidings	1993	1250
172m NW	Railway Sidings	1937	2500
181m W	Mineral Railway Sidings	1967	10560
194m W	Mineral Railway Sidings	1958	1250
228m N	Railway Sidings	1959	1250
235m W	Railway Sidings	1993	1250
238m N	Railway Sidings	1959	1250
241m N	Railway Sidings	1959	1250
247m N	Railway Sidings	1959	1250

This data is sourced from Ordnance Survey®/Groundsure.



22.5 Royal Mail tunnels

Records within 250m**0**

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m**10**

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

Features are displayed on the Railway infrastructure and projects map on [page 387 >](#)

Location	Description
On site	Abandoned
On site	Abandoned
On site	Historical OSM
On site	Abandoned
On site	Abandoned
On site	Abandoned
On site	Abandoned
On site	Abandoned
On site	Abandoned
33m N	Abandoned

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m**25**

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

Features are displayed on the Railway infrastructure and projects map on [page 387 >](#)



Location	Name	Type
On site	Not given	Multi Track
On site	Not given	Multi Track
On site	Not given	Multi Track
On site	Not given	Multi Track
On site	Not given	Multi Track
On site	Not given	Multi Track
On site	Not given	Multi Track
On site	Not given	Multi Track
On site	Not given	Multi Track
On site	Not given	Multi Track
On site	Not given	Multi Track
On site	Not given	Multi Track
On site	Not given	Multi Track
On site	Not given	Multi Track
On site	Ellesmere Port to Warrington Line	rail
On site	Ellesmere Port to Warrington Line	rail
On site	Ellesmere Port to Warrington Line	rail
On site	Ellesmere Port to Warrington Line	rail
On site	Ellesmere Port to Warrington Line	rail
On site	Ellesmere Port to Warrington Line	rail
72m NW	Not given	Multi Track
76m NW	Ellesmere Port to Warrington Line	rail
79m NW	Ellesmere Port to Warrington Line	rail
94m NW	Ellesmere Port to Warrington Line	rail
97m NW	Ellesmere Port to Warrington Line	rail
98m NW	Not given	Multi Track

This data is sourced from Ordnance Survey® and OpenStreetMap.



22.8 Crossrail 2

Records within 500m**0**

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

22.9 HS2

Records within 500m**0**

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 Ltd.



Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see <https://www.groundsure.com/sources-reference> ↗.

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: www.groundsure.com/terms-conditions-april-2026/ ↗.



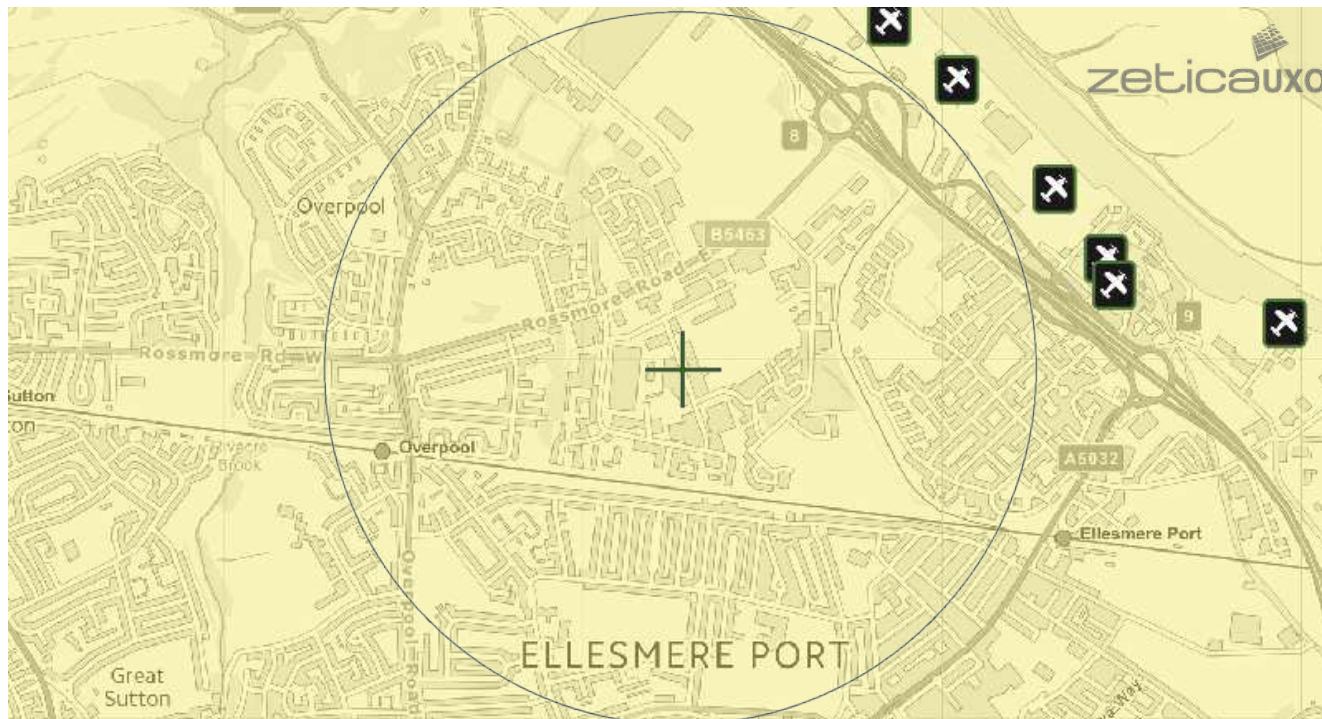
Appendix D – UXO Preliminary Assessment

UNEXPLODED BOMB RISK MAP



SITE LOCATION

Location: CH65 4HB,
Map Centre: 339242,376979



This map principally indicates a hazard from Unexploded Bombs (UXB) due to WWII bombardment. Other sources of Unexploded Ordnance (UXO) may be present. It should be noted that this map does not represent UXO risk and should not be reported as such when reproduced.

LEGEND

- High:** Areas indicated as having a bombing density of 50 bombs per 1000acre or higher.
- Moderate:** Areas indicated as having a bombing density of 15 to 49 bombs per 1000acre.
- Low:** Areas indicated as having 15 bombs per 1000acre or less.

- Military**
- Industry**
- UXO find**
- Other**
- Transport**
- Docks**
- Luftwaffe targets**
- Utilities**
- Bombing decoy**
- Airfields**

How to use your Unexploded Bomb (UXB) risk map?

This map indicates the potential for UXBs to be present because of World War Two (WWII) bombing. It can be incorporated into a technical report, such as a Phase 1 Desk Study, or similar document as an indication of the potential for UXO encounter on a Site. Other sources of UXO may also be indicated, although note that these are not comprehensive and more detailed research is required to confirm their presence.

What if my Site is in a moderate or high density area?

We typically recommend that a detailed UXO desk study and risk assessment is undertaken for sites in an area with a moderate or high bombing density. Additionally, if your site is in close proximity to a strategic target, military establishment, airfield or bombing decoy, then [additional detailed research](#) is recommended.

If my site is in a low risk area, do I need to do anything?

If both the map and other research confirm that there is a low potential for UXO to be present on your site, then, subject to your own comfort and risk tolerance, works can proceed with no special precautions.

If you are unsure whether other sources of UXO may be present, you can request one of our [pre-desk study assessments \(PDSA\)](#) by emailing a site boundary and location to pdsa@zetica.com.

You should never plan site work or undertake a risk assessment using these maps alone. More detail is required, to include an assessment of the likelihood of a source of UXO hazard from other military activity not reflected on these maps.

If I have any questions, who do I contact?

tel: [+44 \(0\) 1993 886682](tel:+44201993886682) email: uxo@zetica.com web: www.zeticauxo.com

The information in this UXB risk map is derived from a range of sources and should be used with the [accompanying notes on our website](#).

Zetica cannot guarantee the accuracy or completeness of the information or data used and cannot accept any liability for any use of the maps. These maps can be used as part of a technical report or similar publication, subject to acknowledgement. The copyright remains with Zetica Ltd.

PA020213 — CHP PLANT, STANLOW MANUFACTURING COMPLEX

DOCUMENT DETAILS

Site name:	CHP Plant, Stanlow Manufacturing Complex		
Reference:	PA020213	Client:	WSP
Date:	17 th September 2024	Contact:	

RECOMMENDATION

While always prudent, a detailed desk study is not considered essential in this instance.

SUMMARY OF FINDINGS

Military Activity	No significant military activity affecting the Site has been identified.
WWI Bombing	Potential targets within approximately 5km of the Site: ▪ Ellesmere Port. ▪ Transport infrastructure and public utilities. ▪ Chemical, engineering, and metal works. ▪ Military establishments. No readily available records have been found indicating that the Site was bombed.
WWII Bombing	The Site was located in Ellesmere Port Urban District (UD), near Chester Rural District (RD). Ellesmere Port UD officially recorded 85No. High Explosive (HE) bombs, with a density of 9.3 bombs per 405 hectares (ha). Chester RD officially recorded 244No. HE bombs, with a density of 5.6 bombs per 405ha. Potential targets within approximately 5km of the Site: ▪ Ellesmere Port. ▪ Transport infrastructure and public utilities. ▪ Chemical, engineering, and metal works. ▪ Military establishments. ▪ Anti-Aircraft (AA) and anti-invasion defences. No readily available records have been found indicating that the Site was bombed.
Bombing Decoys	2No. The nearest was located approximately 3km northeast of the Site.

FURTHER INFORMATION

These findings are based on a cursory review of readily available records; caution is advised if you plan to action work based on this PDSA.

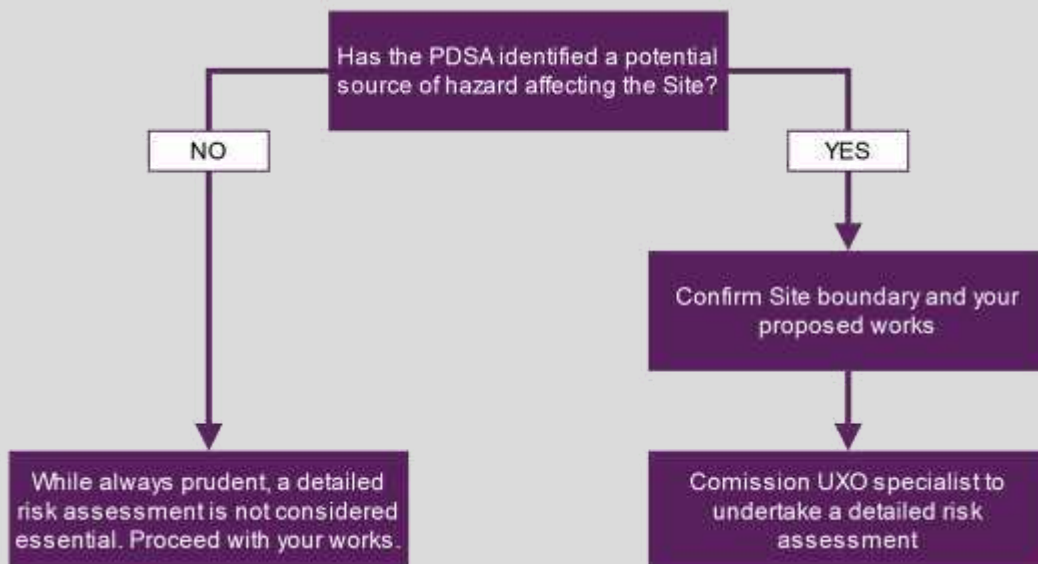
Where a potentially significant UXO hazard source has been identified on the Site, no further research has been undertaken. A detailed UXO desk study and risk assessment may identify other potential UXO hazard sources on the Site.

Visit www.zeticauxo.com to learn more about Zetica's detailed UXO desk studies and other UXO services. Click [here](#) for more information about the most common UXO hazard sources in the UK.

If you have any further queries, please don't hesitate to contact us at uxo@zetica.com or 01993 886 682.

NEXT STEPS

Follow the steps below to determine the appropriate course of action:



Potential UXO hazard identified? If the PDSA has identified a potential source of UXO hazard affecting your site, then a detailed UXO risk assessment is recommended.

No obvious source of UXO hazard? If the PDSA has not identified any obvious source of potential UXO, works can proceed.

It is good practice to raise awareness of the background UXO risk in the UK as part of a standard site induction. This will ensure that appropriate action is taken in the unlikely event that UXO is discovered.

Don't skip a stage: If you skip the detailed risk assessment stage, you could end up undertaking unnecessary work (e.g. trying to detect a UXO hazard that has already been removed).

Similarly, a detailed risk assessment might find that the UXO hazard is worse than expected and has a greater potential to cause harm, requiring a different mitigation approach than would otherwise be undertaken.

Appendix E – General Limitations

REPORT LIMITATIONS - GROUND RISK AND REMEDIATION

GENERAL

1. WSP UK Limited has prepared this report solely for the use of the Client and those parties with whom a warranty agreement has been executed, or with whom an assignment has been agreed and outlined in the body of the report.
2. Unless explicitly agreed otherwise, in writing, this report has been prepared under WSP UK Limited standard Terms and Conditions as included within our proposal to the Client.
3. Project specific appointment documents may be agreed at our discretion and a charge may be levied for both the time to review and finalise appointments documents and also for associated changes to the appointment terms. WSP UK Limited reserves the right to amend the fee should any changes to the appointment terms create an increase risk to WSP UK Limited.
4. The report needs to be considered in the light of the WSP UK Limited proposal and associated limitations of scope. The report needs to be read in full and isolated sections cannot be used without full reference to other elements of the report and any previous works referenced within the report.

PHASE 1 GEO ENVIRONMENTAL AND PRELIMINARY RISK ASSESSMENTS

Coverage: *This section covers reports with the following titles or combination of titles: phase 1; desk top study; geo environmental assessment; development appraisal; preliminary environmental risk assessment; constraints report; due diligence report; geotechnical development review; environmental statement; environmental chapter; project scope summary report (PSSR), program environmental impact report (PEIR), geotechnical development risk register; and, baseline environmental assessment.*

5. The works undertaken to prepare this report comprised a study of available and easily documented information from a variety of sources (including the Client), together with (where appropriate) a brief walk over inspection of the Site and correspondence with relevant authorities and other interested parties. Due to the short timescales associated with these projects responses may not have been received from all parties. WSP UK Limited cannot be held responsible for any disclosures that are provided post production of our report and will not automatically update our report.
6. The opinions given in this report have been dictated by the finite data on which they are based and are relevant only for the purpose for which the report was commissioned. The information reviewed should not be considered exhaustive and has been accepted in good faith as providing true and representative data pertaining to site conditions. Should additional information become available which may affect the opinions expressed in this report, WSP UK Limited reserves the right to review such information and, if warranted, to modify the opinions accordingly.
7. It should be noted that any risks identified in this report are perceived risks based on the information reviewed. Actual risks can only be assessed following intrusive investigations of the site.
8. WSP UK Limited does not warrant work / data undertaken / provided by others.

REPORT LIMITATIONS - GROUND RISK AND REMEDIATION

INTRUSIVE INVESTIGATION REPORTS

Coverage: *The following report titles (or combination) may cover this category of work: geo environmental site investigation; geotechnical assessment; GIR (Ground Investigation reports); preliminary environmental and geotechnical risk assessment; and, geotechnical risk register.*

9. The investigation has been undertaken to provide information concerning either:
 - i. The type and degree of contamination present at the site in order to allow a generic quantitative risk assessment to be undertaken; or
 - ii. Information on the soil properties present at the site to allow for geotechnical development constraints to be considered.
10. The scope of the investigation was selected on the basis of the specific development and land use scenario proposed by the Client and may be inappropriate to another form of development or scheme. If the development layout was not known at the time of the investigation the report findings may need revisiting once the development layout is confirmed.
11. For contamination purposes, the objectives of the investigation are limited to establishing the risks associated with potential contamination sources with the potential to cause harm to human health, building materials, the environment (including adjacent land), or controlled waters.
12. For geotechnical investigations the purpose is to broadly consider potential development constraints associated with the physical property of the soils underlying the site within the context of the proposed future or continued use of the site, as stated within the report.
13. The amount of exploratory work, soil property testing and chemical testing undertaken has necessarily been restricted by various factors which may include accessibility, the presence of services; existing buildings; current site usage or short timescales. The exploratory holes completed assess only a small percentage of the area in relation to the overall size of the Site, and as such can only provide a general indication of conditions.
14. The number of sampling points and the methods of sampling and testing do not preclude the possible existence of contamination where concentrations may be significantly higher than those actually encountered or ground conditions that vary from those identified. In addition, there may be exceptional ground conditions elsewhere on the site which have not been disclosed by this investigation and which have therefore not been taken into account in this report.
15. The inspection, testing and monitoring records relate specifically to the investigation points and the timeframe that the works were undertaken. They will also be limited by the techniques employed. As part of this assessment, WSP UK Limited has used reasonable skill and care to extrapolate conditions between these points based upon assumptions to develop our interpretation and conclusions. The assumption made in forming our conclusions is that the ground and groundwater conditions (both chemically and physically) are the same as have been encountered during the works undertaken at the specific points of investigation. Conditions can change between investigation points and these interpretations should be considered indicative.
16. The risk assessment and opinions provided are based on currently available guidance relating to acceptable contamination concentrations; no liability can be accepted for the retrospective effects of any future changes or amendments to these values. Specific assumptions associated

REPORT LIMITATIONS - GROUND RISK AND REMEDIATION

with the WSP UK Limited risk assessment process have been outlined within the body or associated appendix of the report.

17. Additional investigations may be required in order to satisfy relevant planning conditions or to resolve any engineering and environmental issues.
18. Where soil contamination concentrations recorded as part of this investigation are used for commentary on potential waste classification of soils for disposal purposes, these should be classed as indicative only. Due consideration should be given to the variability of contaminant concentrations taken from targeted samples versus bulk excavated soils and the potential variability of contaminant concentrations between sampling locations. Where major waste disposal operations are considered, targeted waste classification investigations should be designed.
19. The results of the asbestos testing are factually reported and interpretation given as to how this relates to the previous use of the site, the types of ground encountered and site conceptualisation. This does not however constitute a formal asbestos assessment. These results should be treated cautiously and should not be relied upon to provide detailed and representative information on the delineation, type and extent of bulk ACMs and / or trace loose asbestos fibres within the soil matrix at the site.
20. If costs have been included in relation to additional site works, and / or site remediation works these must be considered as indicative only and must be confirmed by a qualified quantity surveyor.

EUROCODE 7: GEOTECHNICAL DESIGN

21. On 1st April 2010, BS EN 1997-1:2004 (Eurocode 7: Geotechnical Design – Part 1) became the mandatory baseline standard for geotechnical ground investigations.
22. In terms of geotechnical design for foundations, slopes, retaining walls and earthworks, EC7 sets guidance on design procedures including specific guidance on the numbers and spacings of boreholes for geotechnical design, there are limits to methods of ground investigation and the quality of data obtained and there are also prescriptive methods of assessing soil strengths and methods of design. Unless otherwise explicitly stated, the work has not been undertaken in accordance with EC7. A standard geotechnical interpretative report will not meet the requirements of the Geotechnical Design Report (GDR) under Eurocode 7. The GDR can only be prepared following confirmation of all structural loads and serviceability requirements. The report is likely to represent a Ground Investigation Report (GIR) under the Eurocode 7 guidance.

DETAILED QUANTITATIVE RISK ASSESSMENTS AND REMEDIAL STRATEGY REPORTS

23. These reports build upon previous report versions and associated notes. The scope of the investigation, further testing and monitoring and associated risk assessments were selected on the basis of the specific development and land use scenario proposed by the Client and may not be appropriate to another form of development or scheme layout. The risk assessment and opinions provided are based on currently available approaches in the generation of Site Specific Assessment Criteria relating to contamination concentrations and are not considered to represent a risk in a specific land use scenario to a specific receptor. No liability can be accepted for the retrospective effects of any future changes or amendments to these values, associated models or associated guidance.



REPORT LIMITATIONS - GROUND RISK AND REMEDIATION

- 24. The outputs of the Detailed Quantitative Risk Assessments are based upon WSP UK Limited manipulation of standard risk assessment models. These are our interpretation of the risk assessment criteria.
- 25. Prior to adoption on site they will need discussing and agreeing with the Regulatory Authorities prior to adoption on site. The regulatory discussion and engagement process may result in an alternative interpretation being determined and agreed. The process and timescales associated with the Regulatory Authority engagement are not within the control of WSP UK Limited. All costs and programmes presented as a result of this process should be validated by a quantity surveyor and should be presumed to be indicative.

GEOTECHNICAL DESIGN REPORT (GDR)

- 26. The GDR can only be prepared following confirmation of all structural loads and serviceability requirements. All the relevant information needs to be provided to allow for a GDR to be produced.

MONITORING (INCLUDING REMEDIATION MONITORING REPORTS)

- 27. These reports are factual in nature and comprise monitoring, normally groundwater and ground gas and data provided by contractors as part of an earthworks or remedial works.
- 28. The data is presented and will be compared with assessment criteria.

Appendix F – CIRIA C552

NHBC (R&D Publication 66: 2008, VOL 2) RISK ASSESSMENT

The identification of potential pollutant linkages is a key aspect of the evaluation of potentially contaminated land. An approach based on the NHBC Guidance (Guidance for the Safe Development of Housing on Land Affected by Contamination Volume 2, 2008) has been adopted within this report. The assessment considers which source – pathway – receptor pollutant linkages are likely to be plausible and potentially complete, and the potential risk they represent. For each of the pollutant linkages, an estimate of:

- the potential severity (consequence) of the risk, and
- the probability (likelihood) of the risk occurring

has been undertaken to assess the potential risk associated with a complete pollutant linkage.

Table 1 – Classification of consequence (NHBC (R&D Publication 66: 2008, VOL 2))

Classification	Definition	Examples
Severe	Highly elevated concentrations likely to result in “significant harm” to human health as defined by the EPA 1990, Part 2A, if exposure occurs. Equivalent to EA Category 1 pollution incident including persistent and/or extensive effects on water quality; leading to closure of a potable abstraction point; major impact on amenity value or major damage to agriculture or commerce. Major damage to aquatic or other ecosystems, which is likely to result in a substantial adverse change in its functioning or harm to a species of special interest that endangers the long-term maintenance of the population. Catastrophic damage to crops, buildings or property	Significant harm to humans is defined in circular 01/2006 as death, disease*, serious injury, genetic mutation, birth defects or the impairment of reproductive functions. Major fish kill in surface water from large spillage of contaminants from site. Highly elevated concentrations of List I and II substances present in groundwater close to small potable abstraction (high sensitivity). Explosion, causing building collapse (can also equate to immediate human health risk if buildings are occupied).
Medium	Elevated concentrations which could result in “significant harm” to human health as defined by the EPA 1990, Part 2A if exposure occurs. Equivalent to EA Category 2 pollution incident including significant effect on water quality; notification required to abstractors; reduction in amenity value or significant damage to agriculture or commerce. Significant damage to aquatic or other ecosystems, which may result in a substantial adverse change in its functioning or harm to a species of special interest that may endanger the long-term maintenance of the population. Significant damage to crops, buildings or property.	Significant harm to humans is defined in circular 01/2006 as death, disease*, serious injury, genetic mutation, birth defects or the impairment of reproductive functions. Damage to building rendering it unsafe to occupy e.g., foundation damage resulting in instability. Ingress of contaminants through plastic potable water pipes.
Mild	Exposure to human health unlikely to lead to “significant harm”. Equivalent to EA Category 3 pollution incident including minimal or short-lived effect on water quality; marginal effect on amenity value, agriculture or commerce. Minor or short-lived damage to aquatic or other ecosystems, which is unlikely to result in a substantial adverse change in its functioning or harm to a species of special interest that would endanger the long-term maintenance of the population. Minor damage to crops, buildings or property.	Exposure could lead to slight short-term effects (e.g., mild skin rash). Surface spalling of concrete.

Classification	Definition	Examples
Minor	No measurable effect on humans. Equivalent to insubstantial pollution incident with no observed effect on water quality or ecosystems. Repairable effects of damage to buildings, structures and services.	The loss of plants in a landscaping scheme. Discoloration of concrete

Table 2 – Classification of probability (NHBC (R&D Publication 66: 2008, VOL 2))

Classification	Definition	Examples
High likelihood	There is pollutant linkage, and an event would appear very likely in the short-term and almost inevitable over the long-term, or there is evidence at the receptor of harm or pollution.	a) <i>Elevated concentrations of toxic contaminants are present in soils in the top 0.5m in a residential garden.</i> b) <i>Ground/groundwater contamination could be present from chemical works, containing a number of USTs, having been in operation on the same site for over 50 years.</i>
Likely	There is pollutant linkage, and all the elements are present and in the right place which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short-term and likely over the long-term.	a) <i>Elevated concentrations of toxic contaminants are present in soils at depths of 0.5-1.0m in a residential garden, or the top 0.5m in public open space.</i> b) <i>Ground/groundwater contamination could be present from an industrial site containing a UST present between 1970 and 1990. The tank is known to be single skin. There is no evidence of leakage although there are no records of integrity tests.</i>
Low likelihood	There is pollutant linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a long period such an event would take place and is less likely in the shorter term.	a) <i>Elevated concentrations of toxic contaminants are present in soils at depths >1m in a residential garden, or 0.5-1.0m in public open space.</i> b) <i>Ground/groundwater contamination could be present on a light industrial unit constructed in the 1990s containing a UST in operation over the last 10 years – the tank is double skinned but there is no integrity testing or evidence of leakage.</i>
Unlikely	There is pollutant linkage, but circumstances are such that it is improbable that an event would occur even in the very long-term.	a) <i>Elevated concentrations of toxic contaminants are present below Hardstanding.</i> b) <i>Light industrial unit <10 years old containing a double- skinned UST with annual integrity testing results available</i>

Table 3 – Comparison of consequence against probability (NHBC (R&D Publication 66: 2008, VOL 2))

Probability (Likelihood)		Consequence			
		Severe	Medium	Mild	Minor
	High Likelihood	Very High Risk	High Risk	Moderate Risk	Low Risk
	Likely	High Risk	Moderate Risk	Moderate/low risk	Low Risk
	Low Likelihood	Moderate Risk	Moderate/low risk	Low Risk	Very Low Risk
	Unlikely	Moderate/low risk	Low Risk	Very Low Risk	Very Low Risk

Table 4 - Risk classification descriptions (NHBC (R&D Publication 66: 2008, VOL 2))

Risk Classification	Definition
Very high risk	There is a high probability that severe harm could arise to a designated receptor from an identified hazard at the site without remediation action OR there is evidence that severe harm to a designated receptor is already occurring. Realisation of that risk is likely to present a substantial liability to be site owner/or occupier. Investigation is required as a matter of urgency and remediation works likely to follow in the short-term.
High risk	Harm is likely to arise to a designated receptor from an identified hazard at the site without remediation action. Realisation of the risk is likely to present a substantial liability to the site owner/or occupier. Investigation is required as a matter of urgency to clarify the risk. Remediation works may be necessary in the short-term and are likely over the longer term.
Moderate risk	It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that any such harm would be severe, and if any harm were to occur it is more likely, that the harm would be relatively mild. Further investigative work is normally required to clarify the risk and to determine the potential liability to site owner/occupier. Some remediation works may be required in the longer term.
Low risk	It is possible that harm could arise to a designated receptor from identified hazard, but it is likely at worst, that this harm if realised would normally be mild. It is unlikely that the site owner/or occupier would face substantial liabilities from such a risk. Further investigative work (which is likely to be limited) to clarify the risk may be required. Any subsequent remediation works are likely to be relatively limited.
Very low risk	It is a low possibility that harm could arise to a designated receptor, but it is likely at worst, that this harm if realised would normally be mild or minor.
No potential risk	There is no potential risk if no pollution linkage has been established.

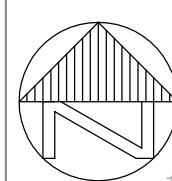
Table 5 – Definitions (NHBC (R&D Publication 66: 2008, VOL 2))

Definition	
Hazard	A property or situation which in certain circumstances could lead to harm. [The properties of different hazards must be assessed in relation to their potential to affect the various different receptors].
Risk	A combination of the probability or frequency of the occurrences of a defined hazard AND the magnitude of the consequences of that occurrence.
Probability	The mathematical expression of the chance of a particular event in a given period of time [e.g., probability of 0.2 is equivalent to 20% or a 1 in 5 chance].

Definition

Likelihood	Probability; the state or fact of being likely.
Consequences	The adverse effects (or harm) arising from a defined hazard which impairs the quality of the environment or human health in the short or longer term.
Pollution linkage	An identified pathway is capable of exposing a receptor to a contaminant and that contaminant is capable of harming the receptor.

Appendix G – Potential Sources of Contamination



342000

377000

377500

376000

376500

375000

375500

342500

343000

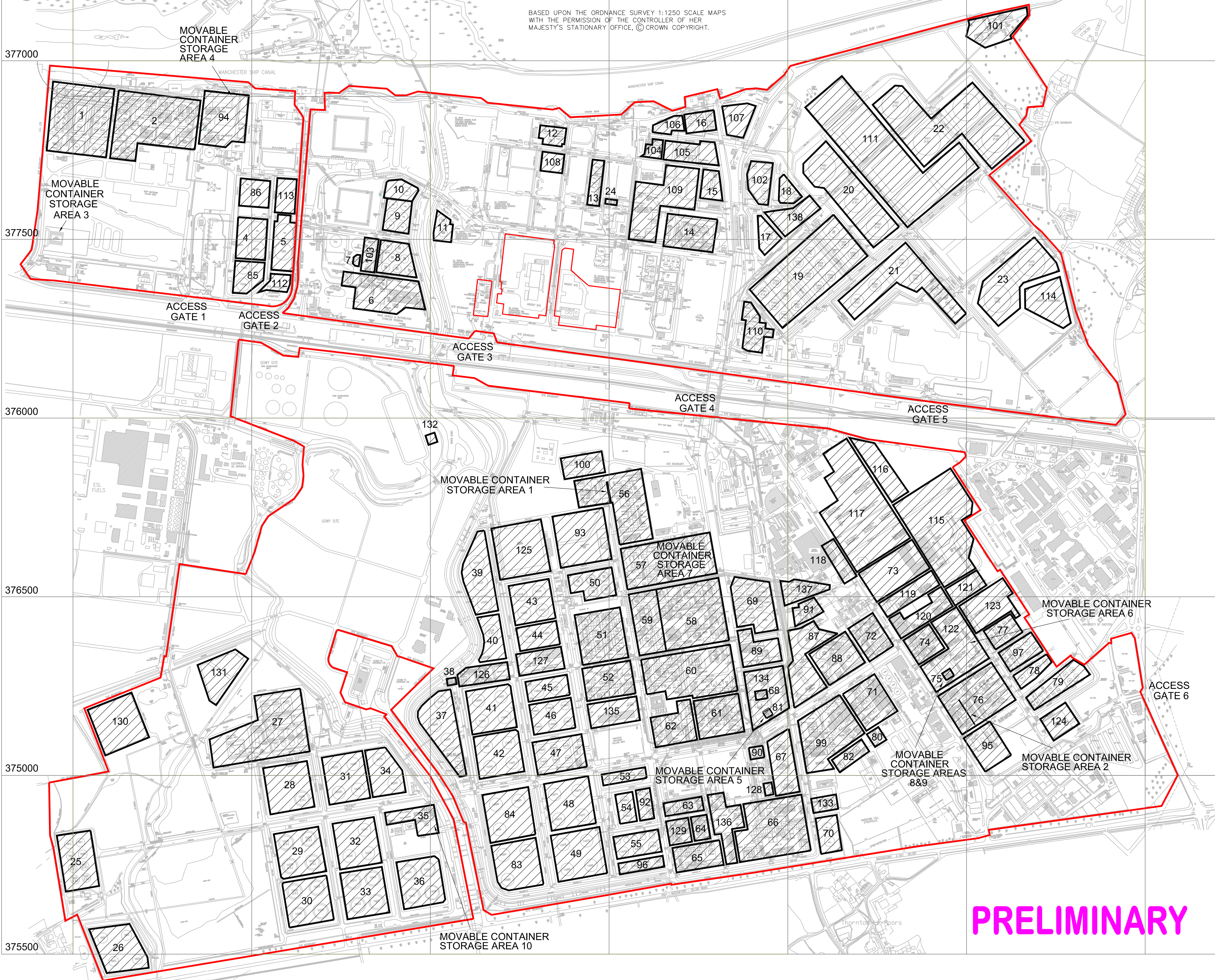
343500

344000

344500

345000

BASED UPON THE ORDNANCE SURVEY 1:1250 SCALE MAPS
WITH THE PERMISSION OF THE CONTROLLER OF HER
MAJESTY'S STATIONARY OFFICE, © CROWN COPYRIGHT.



PRELIMINARY

Essar Oil (UK) Ltd, Stanlow

AREA CODE	PLANT	REFINE	SUB GROUP	09
PLANT/EQ CROSS REF	UNIT No			
	REFINERY LAYOUT			
	HAZARDOUS SUBSTANCES - INCLUDING HISTORICAL CONSENT			
DRAWN I.K.GRIFFITHS	DRAWING NO.			REV:
	00841355			0

D.O. CHECK 4 APPROVED

D.O. CHECK APPROVED

0 08/19

FOR INFORMATION

KVG

JENNIFER BROWN

APPROVED

Vessel Area on Map	Node ID and descriptor	Equipment Item	Material Name	Max Capacity (tonnes)	Asset	Unit	Actual Capacity (tonnes)	Category	Comment	
1	Not listed									
2	Not listed									
3	Not listed									
5	T279	T279	Long residue / waxy distillate	45,000.0	OMS	Black Oils	18,000	34d, E1		
	T282	T282	Waxy distillate / long residue	44,800	OMS	Black Oils	37,200	34d, E1		
	T280	T280	Long residue / waxy distillate	45,000	OMS	Black Oils	0	34d, E1		
	T283	T283	Long residue / waxy distillate	45,000	OMS	Black Oils	38,000	34d, E1		
	S11	S11	Teneco Mops additive (Kerosene 1784)	49.2	infra	Terminal	47	E2		
	S12	S12	Shell Mops additive (NEMO 6167)	51	infra	Terminal	49	E2		
	S13	S13	Shell Dera Additive	12.35	infra	Terminal	11.5	E2, Psc	OOS	
	S15A	S15A	Esso Dera Additive (ES50 PP D3)	12.35	infra	Terminal	11.5	E2, Psc		
	S15B	S15B	Esso Dera Additive (ES50 PP D3)	12.35	infra	Terminal	11.5	E2, Psc		
	S15C	S15C	Powermax	12.35	infra	Terminal	0	E2		
	S15D	S15D	Esso Mops additive High Tec 659MM	12.6	infra	Terminal	11.7	Psc	Not an Env Hazard	
	S15E	S15E	Esso Dera Additive (ES50 PP D3)	12.4	infra	Terminal	11.5	E2, Psc		
	S16	S16	Powermax	12.4	infra	Terminal	0	E2		
	S16	S16	Diesel	50.1	infra	Terminal	48.1	34c, Psc, E2		
	6	S17	S17			infra	Terminal	0		OOS
S172		S172	Shell V power diesel additive (NEMO 4011)	50.6	infra	Terminal	49.7	E2		
S173		S173	Shell V power diesel additive (NEMO 4011)	25.3	infra	Terminal	24.3	E2		
S173A		S173A	BP Dera additive (F500032A)	25.3	infra	Terminal	24.3	E2		
S174		S174	BP Dera additive (F500032A)	39	infra	Terminal	0	E2	OOS	
S175		S175	BP Mops additive (F500032A)	49.4	infra	Terminal	48.5	E2		
S176		S176	Shell Mops additive (NEMO 6167)	47	infra	Terminal	47	E2		
S171		S171			infra	Terminal	0		OOS	
S172 - 1032A		S172 - 1032A	Kero Marker Dye	2	infra	Terminal	2	E2	Kerosene Marker Dye (KMC)	
S172 - 1032B		S172 - 1032B	Kero Marker Dye	2	infra	Terminal	2	E2	Kerosene Marker Dye (KMC)	
S172 - 1032C		S172 - 1032C	Kero Marker Dye	2	infra	Terminal	2	E2	Kerosene Marker Dye (KMC)	
T455		T455	Stops	29.1	infra	Terminal	28.2	34a, Psc, E2		
T456		T456	Stops	29.1	infra	Terminal	28.2	34a, Psc, E2		
V310		V310	Gasoline	10	infra	Terminal	10	34a, Psc, E2		
V130AC		V130AC	Gasoline	12	infra	Terminal	12	34a, Psc, E2		
V130AC	V130AC	Gasoline	12	infra	Terminal	12	34a, Psc, E2			
7	Mobile storage			Petroleum finished products such as gasoline and diesel	1600	infra	Terminal	1600	34a, Psc, E2	Individual reactors holding OOM 25 l each held in suitably spaced parking bays
	T701	T701	Ethanol / Methanol	240	OMS	White Oils	240	22 H2 Psc		
	T702	T702	Ethanol / Methanol	240	OMS	White Oils	240	22 H2 Psc		
	T422	T422	Gasoline	8,990	OMS	White Oils	7,700	34a, Psc, E2		
	T423	T423	Gasoline	8,990	OMS	White Oils	7,700	34a, Psc, E2		
	8	T424	T424	Gasoline	8,990	OMS	White Oils	7,700	34a, Psc, E2	
		T425	T425	Gasoline	8,990	OMS	White Oils	7,700	34a, Psc, E2	
		T426	T426	Gasoline	8,990	OMS	White Oils	7,700	34a, Psc, E2	
		T427	T427	Gasoline	8,990	OMS	White Oils	7,700	34a, Psc, E2	
		T428	T428	Kerosene	8,700	OMS	White Oils	8,300	34a, E2, Psc	
		T433	T433	Kerosene Light Gas oil	8,800	OMS	White Oils	8,300	34a, E2, Psc	
		T429	T429	Gas Oil	9,440	OMS	Black Oils	9,000	34c, E2, Psc	
		T430	T430	Gas Oil	7,000	OMS	Black Oils	6,500	34c, E2, Psc	
		T431	T431	Gas Oil	9,300	OMS	Black Oils	9,300	34c, E2, Psc	
		T432	T432	Gas Oil	9,300	OMS	Black Oils	8,600	34c, E2, Psc	
T434		T434	Gas Oil	9,400	OMS	Black Oils	8,300	34c, E2, Psc		
T435		T435	Gas Oil Dye	44	OMS	Black Oils	44	34c, E2, Psc		
T437		T437	Kerosene	8,700	OMS	White Oils	8,300	34a, E2, Psc		
T1405A		T1405A	Effluent / Ballast Water	4,100	OMS	Black Oils	4,100	Psc, E2		
T1405B		T1405B	Effluent / Ballast Water	4,100	OMS	Black Oils	4,100	Psc, E2		
11 (ex)	Flocculant Additive (BC) at NDAF			Flocculant Additive (BC) at NDAF	3	OMS	Black Oils	3	NOT COMAH	Updated for Suez chemicals
	T460	T460	Effluent / Ballast Water	5,000	OMS	Black Oils	5,000	Psc, E2		
	T470	T470	Effluent / Ballast Water	5,000	OMS	Black Oils	5,000	Psc, E2		
	T551	T551	Toluene	5,210	OMS	White Oils	5,200	Psc		
	T552	T552	Toluene	610	OMS	White Oils	610	Psc		
	T559	T559	Toluene	610	OMS	White Oils	610	Psc		
	T561	T561	Toluene	610	OMS	White Oils	610	Psc		
	T563	T563	Toluene	610	OMS	White Oils	610	Psc		
	T7701 High calorific value waste	Assumed to be like crude	High Calorific value waste	68.5	CMN	ERP	68.5	Psc, E2		
	T7702 High calorific value waste	Assumed to be like crude	High Calorific value waste	133	CMN	ERP	133	Psc, E2		
	T7703 Low calorific value waste	Assumed to be like long residue	Low Calorific value waste	336	CMN	ERP	290	34d, E1, Psc		
	T7704 Low calorific value waste	Assumed to be like long residue	Low Calorific value waste	357	CMN	ERP	460	34d, E1, Psc		
	T7705 Low calorific value waste	Assumed to be like long residue	Low Calorific value waste	357	CMN	ERP	232	34d, E1, Psc		
	T7707 Boiler feed water	Assumed to be like long residue	Water	NA	CMN	ERP	0.06	NOT COMAH		
	T7713 Ballast Line	Assumed to be like long residue	Mix of Ballast	514	CMN	ERP	500	NOT COMAH		
14	T7771 PR sludges low calorific value	Assumed to be like long residue	Low Calorific value waste	202	CMN	ERP	183.7	34d, E1, Psc		
	T7772 PR sludges low calorific value	Assumed to be like long residue	Low Calorific value waste	202	CMN	ERP	183.7	34d, E1, Psc		
	T7706	Out of service	NA	NA	CMN	ERP	0			
	ERP-001 Bay1, 2A/B, 3	Assumed to be fuel gas	Low Calorific value waste	100	CMN	ERP	100	E1, Psc	Solids with entrained liquid hydrocarbons	
	ERP-001 17751 / 52	Assumed to be fuel gas	Hydrogen	0.03780	CMN	ERP	0.03			
	ERP-001 17751 / 52	Assumed to be fuel gas	Nitrogen	0.0357	CMN	ERP	0	NOT COMAH		
	ERP-001 17751 / 52	Assumed to be fuel gas	LPG	0.20145	CMN	ERP	0.2	18		
	ERP Boiler Oxygen Scavenger				CMN	ERP	1.5	NOT COMAH		
	ERP Boiler Ammonia Scavenger	Mother-daughter IBC	Control 055603	1.5	CMN	ERP	1.5	NOT COMAH	Updated for Suez chemical	
	ERP Condensate treatment	Mother-daughter IBC	BP65907AR-71	1.5	CMN	ERP	1.5	NOT COMAH		
	ERP Condensate treatment	IBC	Solite 4PZL	2	CMN	ERP	2	H2, Psc		
	ERP Condensate treatment	IBC	Stannous Butadiene	2	CMN	ERP	2	E1, Psc	Updated for Suez chemical	
	15	T703	T703	Gasoline	266	OMS	White Oils	230	34a, Psc, E2	
		T704	T704	Gasoline	266	OMS	White Oils	230	34a, Psc, E2	
		T4619	T4619	Assumed to be Neodol	1184	CMN	ERP	1184	E1	
T4620		T4620	Flushing from decommissioning Alcohols / SHOP units	Assumed to be Neodol	1184	CMN	ERP	1184	E1	
T4621		T4621	Flushing from decommissioning Alcohols / SHOP units	Assumed to be Neodol	1184	CMN	ERP	0	E1	OOS
T4640		T4640	Flushing from decommissioning Alcohols / SHOP units	Assumed to be Neodol	1600	CMN	ERP	1600	Psc, E1	
17		T1091	T1091	Ethylbenzene	11,600	OMS	White Oils	11,600	Psc	
		T1120	T1120	Ethylbenzene	18,800	OMS	White Oils	18,800	Psc	
		T1955	T1955	Misc. mops component	9,800	OMS	White Oils	8,000	34a, Psc, E2	
		T1956	T1956	Misc. mops component	9,800	OMS	White Oils	8,000	34a, Psc, E2	
		T1957	T1957	Misc. mops component	9,800	OMS	White Oils	8,000	34a, Psc, E2	
		T1958	T1958	Misc. mops component	9,800	OMS	White Oils	8,000	34a, Psc, E2	
		T1959	T1959	Misc. mops component	9,800	OMS	White Oils	8,000	34a, Psc, E2	
		T1959	T1959	Misc. mops component	9,800	OMS	White Oils	7,700	34a, Psc, E2	
		T1960	T1960	Misc. mops component	9,800	OMS	White Oils	7,700	34a, Psc, E2	
	T1961	T1961	Misc. mops component	9,800	OMS	White Oils	8,300	34a, Psc, E2		
	T1962	T1962	Misc. mops component	9,800	OMS	White Oils	8,300	34a, Psc, E2		
	T1963	T1963	Misc. mops component	9,800	OMS	White Oils	8,300	34a, Psc, E2		
	T1964	T1964	Misc. mops component	9,800	OMS	White Oils	8,300	34a, Psc, E2		
	T1965	T1965	Misc. mops component	9,800	OMS	White Oils	8,300	34a, Psc, E2		
	T1966	T1966	Misc. mops component	9,800	OMS	White Oils	8,300	34a, Psc, E2		
19	T1967	T1967	Misc. mops component	9,800	OMS	White Oils	8,300	34a, Psc, E2		
	T1968	T1968	Misc. mops component	9,800	OMS	White Oils	8,300	34a, Psc, E2		
	T1969	T1969	Misc. mops component	9,800	OMS	White Oils	8,300	34a, Psc, E2		
	T1970	T1970	Misc. mops component	9,800	OMS	White Oils	8,300	34a, Psc, E2		
	T1971	T1971	Misc. mops component	9,800	OMS	White Oils	8,300	34a, Psc, E2		
	T1972	T1972	Misc. mops component	9,800	OMS	White Oils	8,300	34a, Psc, E2		

51	HFA-015 Fresh Acid	V6054 V6056 P6063	Hydrofluoric Acid	49.4	ODP and OMC	HFA	25	H1		
	HFA-016 Alkylation Reactor	R6051 V6055 S6056A/B P6054A/B	Mixed Butanes	30.26	ODP and OMC	HFA	30.26	18, P2		
	HFA-016 Alkylation Reactor	R6051 V6055 S6056A/B P6054A/B	Alkylate	8.01	ODP and OMC	HFA	8.01	34a, P5a, E2		
	HFA-016 Alkylation Reactor	R6051 V6055 S6056A/B P6054A/B	Hydrofluoric Acid	50.73	ODP and OMC	HFA	20	H1		
	HFA-017 Isotripper Bottoms	E6060A/B TUB, E6061 TUB & SHELL, C6052 BOT, E6062 TUB & SHELL, E6063A/B TUB, E6063A TUB	Mixed Butanes	19.032	ODP and OMC	HFA	19.032	18, P2		
	HFA-017 Isotripper Bottoms	E6060A/B TUB, E6061 TUB & SHELL, C6052 BOT, E6062 TUB & SHELL, E6063A/B TUB, E6063A TUB	Alkylate	4.8	ODP and OMC	HFA	4.8	34a, P5a, E2		
	HFA-017 Isotripper Bottoms	E6060A/B TUB, E6061 TUB & SHELL, C6052 BOT, E6062 TUB & SHELL, E6063A/B TUB, E6063A TUB	Hydrofluoric Acid	0.168	ODP and OMC	HFA	0.168	H1		
	HFA-018 Depropaniser Feed Settler	E6052 OVHD, E6067 TUB, V6059 P6057A/B, V6057	Mixed Butanes / Propane	83.19	ODP and OMC	HFA	61.57	18, P2		
	HFA-018 Depropaniser Feed Settler	E6052 OVHD, E6067 TUB, V6059 P6057A/B, V6057	Hydrofluoric Acid	6.8375	ODP and OMC	HFA	4.9125	H1		
	HFA-019 Acid Regeneration Columns	P6058A/B, C6056, C6053 E6078 TUB, E6066 TUB	Propane / Mixed Butanes	2.162	ODP and OMC	HFA	2.162	18, P2		
52	HFA-019 Acid Regeneration Columns	P6058A/B, C6056, C6053 E6078 TUB, E6066 TUB	Hydrofluoric Acid	0.0161	ODP and OMC	HFA	0.0161	H1		
	HFA-020 Depropaniser Bottoms	E6068A/B TUB & SHELL, C6054 BOT, E6070 TUB, E6069 TUB, S6053A/B	Mixed Butanes	2.7	ODP and OMC	HFA	2.7	18, P2		
	HFA-021 Depropaniser Overheads	C6054 OVHD, E6071 TUB, V6060, P6059A/B	Propane / Mixed Butanes	5.664	ODP and OMC	HFA	3.552	18, P2		
	HFA-021 Depropaniser Overheads	C6054 OVHD, E6071 TUB, V6060, P6059A/B	Hydrofluoric Acid	0.238	ODP and OMC	HFA	0.148	H1		
	HFA-022 HP Stripper Column	C6055, E6072 TUB	Propane / Mixed Butanes	0.864	ODP and OMC	HFA	0.864	18, P2		
	HFA-022 HP Stripper Column	C6055, E6072 TUB	Hydrofluoric Acid	0.036	ODP and OMC	HFA	0.036	H1		
	HFA-023 Propane Alumina Treaters	E6073 TUB, S6054A/B, V6061A/B, E6075 TUB, E6074 TUB & SHELL, E6076 TUB, V6062	Propane / Mixed Butanes	0.2	ODP and OMC	HFA	0.2	18, P2		
	HFA-024 Butane Alumina Treaters	E6079 TUB & SHELL, E6080 TUB, E6081 TUB, V6075 A/B/C, E6082 A/B TUB, V6076, V6058	Mixed Butanes	21.4	ODP and OMC	HFA	21.4	18, P2		
	HFA-025 Polymer Surge Drum	V6063 V6064	Mixed Butanes	1.792	ODP and OMC	HFA	1.792	18, P2		
	HFA-025 Polymer Surge Drum	V6063 V6064	Alkylate	3.808	ODP and OMC	HFA	3.808	34a, P5a, E2		
53	HFA-025 Polymer Surge Drum	V6063 V6064	Hydrofluoric Acid	0.0056	ODP and OMC	HFA	0.0056	H1		
	HFA Heating media	Various Exchangers	Slurry	50	ODP and OMC	HFA	50	34d, E1		
	Process Fouling Control aid	IBC	BPI3420K	1	ODP and OMC	HFA	1	P5c		
	HFA anti-scalant	IBC	DMT485-88	2	ODP and OMC	HFA	2	NOT COMAH		
	HFA process corrosion inhibitor	IBC	Gengard GH7004	2.5	ODP and OMC	HFA	2.5	NOT COMAH	Updated for Suez chemicals	
	HFA process corrosion inhibitor	IBC	BPC67015-88	2.5	ODP and OMC	HFA	2.5	NOT COMAH	Updated for Suez chemicals	
	HFA process corrosion inhibitor	IBC	Inhibitor A23104	2.5	ODP and OMC	HFA	2.5	NOT COMAH	Updated for Suez chemicals	
	HFA process corrosion inhibitor	IBC	Fluigent MS6201	0.2	ODP and OMC	HFA	0.2	NOT COMAH	Updated for Suez chemicals	
	HFA process corrosion inhibitor	IBC	Gengard GH7300	0.2	ODP and OMC	HFA	0.2	NOT COMAH	Updated for Suez chemicals	
	HFA process corrosion inhibitor	IBC	Spectra 801551E	0.2	ODP and OMC	HFA	0.2	NOT COMAH	Updated for Suez chemicals	
54	HFA process corrosion inhibitor	IBC	BPC12210-7b	0.2	ODP and OMC	HFA	0.2	P5c		
	HFA process corrosion inhibitor	IBC	BPC1651K-71	1	ODP and OMC	HFA	1	E2		
	Chloride Inhibitor	V6028	Perchloroethylene	1.2	ODP and OMC	HFA	1.2	E2		
	HFA KOH Regen System	IBC	BPW76453K - Flocculant	7	ODP and OMC	NOT COMAH		NOT COMAH	New flocculant	
	CTB Biocide	IBC	Spectra 081274		ODP and OMC			E1		
	55	EBU-001 Dry Gas Feed	K6711, E6713 AIR COOLER, E6750A/B TUBE & SHELL, C6750 GAS, E6752 TUBE, V6750 GAS, E6865 TUB, E6866 TUB, E6860A/B TUB, V6711, R6711A, S6711A/B, V6713	Hydrogen	0.1	ODP and OMC	EBU	0.03	15, P2	
		EBU-001 Dry Gas Feed	K6711, E6713 AIR COOLER, E6750A/B TUBE & SHELL, C6750 GAS, E6752 TUBE, V6750 GAS, E6865 TUB, E6866 TUB, E6860A/B TUB, V6711, R6711A, S6711A/B, V6713	Methane / Ethane	2.3	ODP and OMC	EBU	1.2	P2	
		EBU-001 Dry Gas Feed	K6711, E6713 AIR COOLER, E6750A/B TUBE & SHELL, C6750 GAS, E6752 TUBE, V6750 GAS, E6865 TUB, E6866 TUB, E6860A/B TUB, V6711, R6711A, S6711A/B, V6713	Nitrogen	0.5	ODP and OMC	EBU	0.3	NOT COMAH	
		EBU-002 Deethaniser Bottoms and Reflux	C6750, E6751 TUB, V6750A/B, P6750A/B	Propane and N-Butane	7.6	ODP and OMC	EBU	7.6	18, P2	
		EBU-003 Propylene Refrigerant Liquid	V6753 LIQ, E6753 SHELL	Propylene	6.4	ODP and OMC	EBU	6.4	18, P2	
EBU-004 Propylene Refrigerant Vapour		V6753 LIQ, E6753 SHELL	Propylene	0.2	ODP and OMC	EBU	0.2	18, P2		
EBU-005 Benzene Feed		P4153A/B, E6801A/B TUBE, C6800 BOT, V6802 LIQ, P6801A/B, E6804 TUB, P6800A/B	Benzene	3.2	ODP and OMC	EBU	3.2	P5a		
EBU-006 Benzene Dehydrator Overheads		C6800OVHD, E6805 AIR COOLER, V6802 GAS	Benzene	0.1	ODP and OMC	EBU	0.1	P5a		
EBU-007 Benzene Recovery Stream		C6851 OVHD, E6856 TUB, V6852, P6852A/B, V6850, P6850A/B	Benzene	48.5	ODP and OMC	EBU	42.8	P5a		
EBU-008 Pre-Fractionator Benzene		C6850 TOP, E6854 TUBE, E6865 SHELL, V6851, P6851A/B, E6854 AIR COOLER, E6862A/B TUB	Benzene	37.5	ODP and OMC	EBU	7.6	P5a		
56	EBU-009 Benzene to Furnace	E6852A/B TUB, E6850 TUB, E6803A/B TUB, P6800 TUB	Benzene	0.3	ODP and OMC	EBU	0.3	P5a		
	EBU-010 Alkylation Reactor	R6800A / B	Benzene / Ethylbenzene	1.1	ODP and OMC	EBU	1.1	P5a		
	EBU-010 Alkylation Reactor	R6800A / B Catalyst	EM-3020	9.4	ODP and OMC	EBU	9.4	NOT COMAH		
	EBU-011 Ethylbenzene Fractionator	C6850 BOT, E6850 SHELL, E6852A/B SHELL, E6851 SHELL & TUB, C6851 BOT, E6855A/B TUB	Benzene / Ethylbenzene	41.5	ODP and OMC	EBU	41.5	P5a		
	EBU-012 EB & PEB Recovery Columns	C6852, E6857A/B TUB, P6853A/B, C6853 BOT, E6859A/B TUB, P6855A/B, E6861 AIR COOLER	Benzene / Ethylbenzene	79.1	ODP and OMC	EBU	79.1	P5a		
	EBU-013 EB Product	C6852 OVHD, E6858 TUB, V6853, P6854A/B, E6803A/B SHELL, E6863 AIR COOLER	Ethylbenzene	75.8	ODP and OMC	EBU	42.5	P5a		
	EBU-014 PEB Residue	C6854 BOT, P6855A/B, P6855A/B	Polyethylene Benzene (PEB) residue	6.1	ODP and OMC	EBU	6.1	E1		
	EBU-015 B2 Absorber Overheads	C6854 OVHD	Ethane / Methane	0.2	ODP and OMC	EBU	0.2	P2		
	EBU-015 B2 Absorber Overheads	C6854 OVHD	Nitrogen	0.1	ODP and OMC	EBU	0.1	NOT COMAH		
	EBU-016 PEB Recovery Drum	C6853 OVHD, E6860TUB, V6854, P6857A/B, P6800 TUB	Polyethylene Benzene	20.7	ODP and OMC	EBU	3.6	E1	Classification from SDS	
57	EBU-017 Slurry heating medium	E6806A/B Tubes, E6813A/B tubes, N6853A/B tubes, E6855A/B tubes, E6857A/B tubes (one on line one off line in each pair at any one time)	Slurry	50.0	ODP and OMC	EBU	50.0	34d, E1		
	58	T4057	T4057	Heavy Cycle Oil / slurry	3.400	OMS	Black Oils	2.800	34d, E1, P5c	
		T4059	T4059	Heavy Cycle Oil / slurry / Flushing oil	3.170	OMS	Black Oils	3.100	34d, E1, P5c	
		T4058	T4058	Slurry / Heavy Cycle Oil	3.170	OMS	Black Oils	3.100	34d, E1	
		T4060	T4060	Heavy Fuel Oil / Light Gas Oil	2.880	OMS	Black Oils	2.400	34d, E1, P5c	UGO is 34d, HFO is E1
		T4061	T4061	Slurry	2.500	OMS	Black Oils	2.100	34d, E1	
		T4142	T4142	Kerosene	5.560	OMS	White Oils	5.5	34d, E2, P5c	
		T4142	T4142	Sour water	5.560	OMS	White Oils	5.5	37, P2, H2, E1	Tank can also be sour water
		T4143	T4143	Kerosene	5.560	OMS	White Oils	5.500	34d, E2, P5c	
		T4139	T4139	Kerosene	5.560	OMS	White Oils	5.500	34d, E2, P5c	
001 - P04F tankage		T1400A and T1400B	Hydrogen Sulphide	0.116	REF	P04F	0.316	37, P2, H2, E1	Added 2° COMAH classifications as defined for H2S	
59	001 - P04F tankage	T1400A and T1400B	Water	6320	REF	P04F	6320	NOT COMAH		
	T4009	T4009	Sour Water storage	18.6	U/L	SW1	17.4	E1		
	T4009	T4009	Sour Water storage	26.7	U/L	SW1	25.0	37, P2, H2, E1		
	T4009	T4009	Sour Water storage	5.0	U/L	SW1	5.0	34d, P5a, E2		
	T4010	T4010	Sour Water storage	2854.8	U/L	SW1	2677.6	NOT COMAH		
	T4010	T4010	Sour Water storage	18.6	U/L	SW1	17.4	E1		
	T4010	T4010	Sour Water storage	26.7	U/L	SW1	25.0	37, P2, H2, E1		
	T4010	T4010	Sour Water storage	5.0	U/L	SW1	5.0	34d, P5a, E2		
	T4010	T4010	Sour Water storage	2854.8	U/L	SW1	2677.6	NOT COMAH		
	Plant-001 Reactor Loop	P9401A/B, E9401A/B SHELL & TUBE, P9401, P9402, P9403, P9404, R9401, R9402, R9403, R9404, E9402A/B AIR COOLER, E9403A/B, V9401, P9451A/B	Hydrogen	10	ODP and OMC	Plant 3	10.00	15, P2		
60	Plant-001 Reactor Loop	P9401A/B, E9401A/B SHELL & TUBE, P9401, P9402, P9403, P9404, R9401, R9402, R9403, R9404, E9402A/B AIR COOLER, E9403A/B, V9401, P9451A/B	Propane	54	ODP and OMC	Plant 3	54.00	18, P2		
	Plant-001 Reactor Loop	P9401A/B, E9401A/B SHELL & TUBE, P9401, P9402, P9403, P9404, R9401, R9402, R9403, R94								

	AROM-011 Toluene Reflux	C5421 OVHD, E5422A/B/C/D AIR COOLER, V5421, P5421, E5423 AIRCOOLER	Toluene	3.47	ODP and OMC	AROM	3.47	P5a	Toluene is H225; FP < 0° and IBP is 80°C. Pressure does not change the flammability at this point.
	AROM-012 Benzene Product	C5401 OVHD, E5402A/B/C/D AIRCOOLER, V5401A/B, P5401, P5402, E5403 AIRCOOLER	Benzene	7.76	ODP and OMC	AROM	7.76	P5c	Benzene is H225; FP < 0° and IBP is 80°C. Pressure does not change the flammability at this point.
	AROM - Antifoam		Benzene	1.1	ODP and OMC	AROM	1.1	34b, E2, P5c	Main component is > 90% kerosene.
	E6301	E6301	Core Flow 500	2.85	ODP and OMC	HDS2	2.85	E2, P5c	I think this should be 34 (b) - contains hydrocarbons and up to 30% kerosene (naphtha fraction)
	TS301, TS302		Sulfolane		ODP and OMC	AROM		NOT COMAH	
58 - V4808	FGM-001 - Fuel Gas Main	V4807, V4809, V4808 + pipework network	Nitrogen	0.014	REF	FLARE	0.0	NOT COMAH	Renamed node to FGM instead of FLA
	FGM-001 - Fuel Gas Main	V4807, V4809, V4808 + pipework network	Hydrogen	0.007	REF	FLARE	0.0	15, P2	Renamed node to FGM instead of FLA
	FGM-001 - Fuel Gas Main	V4807, V4809, V4808 + pipework network	LPG	0.079	REF	FLARE	0.1	18, P2	Renamed node to FGM instead of FLA
59	HD72-001 HCCG Feed	V523, P522/28	Heavy Cat Cracked Gasoline	33.8	REF	HD72	33.80	34a, E2, P5c	JB - HCCG is H226; BP > 65 °C
	HD72-002 HD72 Reaction	E501A/B/C/D/TUBE & SHELL, P501, R501, V501 LIQ, E502 AIR COOLER	Methane	0.1055	REF	HD72	0.11	P2	
	HD72-002 HD72 Reaction	E501A/B/C/D/TUBE & SHELL, P501, R501, V501 LIQ, E502 AIR COOLER	Hydrogen	0.0075	REF	HD72	0.01	15, P2	
	HD72-002 HD72 Reaction	E501A/B/C/D/TUBE & SHELL, P501, R501, V501 LIQ, E502 AIR COOLER	Hydrogen Sulphide	0.002	REF	HD72	0.00	37, P2, H2, E1	
	HD72-002 HD72 Reaction	E501A/B/C/D/TUBE & SHELL, P501, R501, V501 LIQ, E502 AIR COOLER	Heavy Cat Cracked Gasoline	2.0045	REF	HD72	2.00	34a, P5a, E2	JB - HCCG is H226; BP > 65 °C
	HD7-2 Catalyst	R501	KF841 (NiMo)	22	REF	HD72	22.00	NOT COMAH	
	HD72-003 Recycle gas	V503, K501	Hydrogen	0.0075	REF	HD72	0.01	15, P2	
	HD72-003 Recycle gas	V503, K501	Hydrogen Sulphide	0.00162	REF	HD72	0.00	37, P2, H2, E1	
	HD72-003 Recycle gas	V503, K501	Methane / Ethane	0.0168	REF	HD72	0.02	P2	
	HD72-003 LP Separator	V501, K501	Heavy Cat Cracked Gasoline	0.00408	REF	HD72	0.00	34a, P5a, E2	JB - HCCG is H226; BP > 65 °C
	HD72-005 LP Separator	V502, P504B	Heavy Cat Cracked Gasoline	12.6	REF	HD72	12.60	34a, E2, P5c	
	HD72-005 LP Separator	V502, P504B	Hydrogen Sulphide	0.04	REF	HD72	0.04	37, P2, H2, E1	
	HD72-005 LP Separator	V502, P504B	Methane / Ethane	0.06	REF	HD72	0.06	P2	
	HD72-005 LP Separator	V502, P504B	Propane / Butane	0.13	REF	HD72	0.13	18, P2	
	HD72-005 LP Separator	V502, P504B	Pentane	0.08	REF	HD72	0.08	34a, P5a, E2	
	HD72-006 LP Gas	V513, V511 GAS	Hydrogen Sulphide	0.00608	REF	HD72	0.01	37, P2, H2, E1	
	HD72-006 LP Gas	V513, V511 GAS	Ammonia	0.00038	REF	HD72	0.00	P2, E1	
	HD72-006 LP Gas	V513, V511 GAS	Methane / Ethane	0.01178	REF	HD72	0.01	P2	
	HD72-006 LP Gas	V513, V511 GAS	Propane / Butane	0.00936	REF	HD72	0.01	18, P2	
	HD72-009 LP Gas	V513, V511 GAS	Pentane	0.00114	REF	HD72	0.00	34a, P5a, E2	Confirmed classification from ECHA data
	HD72-009 LP Gas	V513, V511 GAS	Heavy Cat Cracked Gasoline	0.01026	REF	HD72	0.01	34a, E2, P5c	JB - HCCG is H226; BP > 65 °C
	HD72-007 Hydrocrater Stripper	E511 TUBE & SHELL, C511 BOT, E513A/B TUB, P516A/B, E533 AIR COOLER	Heavy Cat Cracked Gasoline	54.5	REF	HD72	54.50	34a, P5a, E2	JB - HCCG is H226; BP > 65 °C
	HD72-009 Stripper Overheads	C511 OVHD, E512 AIR COOLER, V511, P512A/B	Hydrogen Sulphide	0.0425	REF	HD72	0.04	37, P2, H2, E1	
	HD72-009 Stripper Overheads	C511 OVHD, E512 AIR COOLER, V511, P512A/B	Methane / Ethane	0.0595	REF	HD72	0.06	P2	
	HD72-009 Stripper Overheads	C511 OVHD, E512 AIR COOLER, V511, P512A/B	Propane / Butane	0.1292	REF	HD72	0.13	18, P2	
	HD72-009 Stripper Overheads	C511 OVHD, E512 AIR COOLER, V511, P512A/B	Pentane	0.085	REF	HD72	0.09	34a, P5a, E2	Confirmed classification from ECHA data
	HD72-010 Overhead Compressor	C511 OVHD, E512 AIR COOLER, V511, P512A/B	Heavy Cat Cracked Gasoline	1.3838	REF	HD72	1.38	34a, P5a, E2	JB - HCCG is H226
	HD72-010 Overhead Compressor	K511, E514 TUB, V514	Hydrogen Sulphide	0.00544	REF	HD72	0.01	37, P2, H2, E1	
	HD72-010 Overhead Compressor	K511, E514 TUB, V514	Hydrogen	0.0336	REF	HD72	0.01	15, P2	
	HD72-010 Overhead Compressor	K511, E514 TUB, V514	Ammonia	0.00034	REF	HD72	0.00	P2, E1	
	HD72-010 Overhead Compressor	K511, E514 TUB, V514	Methane / Ethane	0.01094	REF	HD72	0.01	P2	
	HD72-010 Overhead Compressor	K511, E514 TUB, V514	Propane / Butane	0.00748	REF	HD72	0.01	18, P2	
	HD72-010 Overhead Compressor	K511, E514 TUB, V514	Pentane	0.00102	REF	HD72	0.00	34a, P5a, E2	Confirmed classification from ECHA data
	HD72-010 Overhead Compressor	K511, E514 TUB, V514	Naphtha	0.00918	REF	HD72	0.01	34a, E2, P5c	
	HD72-011 Benzene Deaerator	E509 TUB, C501	Benzene	11.02	REF	HD72	0.00	NOT COMAH	
	HD72-013 Desorbed Benzene to Storage	P504A	Benzene	4.86	REF	HD72	0.00	DO5 - MOC OMP472P	
	HD72-014 Deethaniser Overheads	C541 OVHD, E542 TUB, V542, P542/28	Ethane	0.784	REF	HD72	0.78	P2	
	HD72-014 Deethaniser Overheads	C541 OVHD, E542 TUB, V542, P542/28	Propane / Butane	1.176	REF	HD72	1.18	18, P2	
HD72-015 DePropaniser	C542, E544 TUB, V541, P543A/B, E543 TUBE, E545 TUBE	Propane / Butane	6.37	REF	HD72	6.37	18, P2		
60	GSU-001 - Absorber and Debutaniser Bottoms	C3051 bot, E3058A/B TUB, V3052, E3057 TUBE,	Fuel Gas	12.1	REF	GSU	12.1	P2	
	GSU-001 - Absorber and Debutaniser Bottoms	C3051 bot, E3058A/B TUB, V3052, E3057 TUBE,	Gasoline	108.9	REF	GSU	60.2	34a, P5a, E2	
	GSU-002 - Debutaniser Overheads	C3052, C3052 OVHD, E3059A/B/C/D/E/F/G/H/I/J/K/L/M AIR COOLER, V3053	Gasoline	89	REF	GSU	48.7	34a, P5a, E2	
	GSU-003 - LPG Treatment	P3052A/B, C, E3451, TUB, C3451, S3451/B, V3452, V3458, V3455/A1, S3455/S7, V3451, V3459	LPG	93	REF	GSU	80.8	18, P2	
	GSU-004 - LPG Caustic	P3463A/B, E3462 TUBE, C3462, S3452A/B, V3460, V3456	LPG	124.4	REF	GSU	124.4	18, P2	
	GSU-005 - Depropaniser	P3457A/B, E3062 TUBE, C3053, E3067A/B TUBE, C3054, E3074A/B/C/D, P3061A/B	LPG	53	REF	GSU	53.0	18, P2	
	GSU-006 - Propane Propylene Splitter	C3055, E3073A/B/C/D/E/F/G/H/I/J/K/L/M/N/O/P/Q/R/S/T/U/V/W AIR COOLER, V3056, P3065A/B	Propylene	24	REF	GSU	24.0	18, P2	
	GSU-007 - Propane to Storage	P3061A/B, E3072 TUBE	LPG	4	REF	GSU	4.0	18, P2	
	GSU-008 - Propylene Treatment	P3060A/B, C3551A/B, S3551A/B, C3552, S3552A/B, E3553 SHELL, V3552, S3553A/B, E3552 SHELL, V3551, P3551A/B	Propylene	30.6	REF	GSU	30.6	18, P2	
	GSU-009 - Propylene To Storage	P3552A/B	Propylene	0.65	REF	GSU	0.7	18, P2	
	GSU-010 - Debutaniser Bottoms	P3054A/B, E3061 SHELL, E3057 SHELL, C3951 BOT, E3951 TUB, E3952 TUB, E3953 TUB	Gasoline	93	REF	GSU	93.0	34a, P5a, E2	
	GSU-011 - FCCCS Splitter Bottoms	P3951A/B, E3952 SHELL, E3959 AIR COOLER	Gasoline	10.4	REF	GSU	10.4	34a, P5a, E2	
	GSU - 012 - FCCCS Side Splitter	C3952, E3955 TUBE, P3952A/B, E3951 SHELL	Gasoline	113.5	REF	GSU	18.1	34a, P5a, E2	
	GSU-013 - FCCCS Splitter Overheads	C3951 OVHD, E3956 AIR COOLER, V3951 GAS	Gasoline	193	REF	GSU	4.8	34a, P5a, E2	
	GSU-014 - FCCCS Gasoline Merox reactor	V3951 LIQ, P3954A/B, P3953A/B, E3966A/B AIR COOLER, M3652 MIXER, R3653, E3652	Gasoline	0.8	REF	GSU	0.8	34a, P5a, E2	
	GSU - 015 - HCUV Gasoline Merox Reactor	E3064, M3653 MIXER, R3653	Gasoline	29.9	REF	GSU	0.0	34a, P5a, E2	
	GSU - 016 - ADIP Absorber	E3151 SHELL & TUBE, C3152, V3152, V3153	Fuel Gas	0.75	REF	GSU	0.8	P2	
	GSU - Catalyst	C3981	Merox WS2	45.0	REF	GSU	69.2	NOT COMAH	
	GSU Denitrator Inhibitor	IBC	Towpact 1130	1.1	REF	GSU	1.1	NOT COMAH	
	GSU Process Anti foam	IBC	BP45140K	1.0	REF	GSU	1.0	NOT COMAH	
	GSU Process Anti Inhibit	IBC	BP45173-89	2.2	REF	GSU	2.2	E1	
	GSU Heating medium	Various Exchangers on the 3rd splitter	Slurry	50	REF	GSU2	50	34a, E1	
	GSU CDM (new)	Back up hydrogen storage	Hydrogen	2.1	REF	GSU2	2.1	15, P2	
	60L + 62	CCU-007 LCO Stripper	(C2251), E2279 SHELL, E3060A/B SHELL, E3061 SHELL, P2254A/B, C2252, E2267A/B TUBE	Light Cycle Oil	416	REF	CCU	18.5	34a, P5a, E1
60L + 62	CCU-012 Wet Gas Compressor 2ND stage	K2251, C3051 OVHD, E3054 TUBE, V3051, P3051A/B, P3068A/B, E3055, V3151	H2S	0.09	REF	CCU	0.09	37, P2, H2, E1	
60L + 62	CCU-012 Wet Gas Compressor 2ND stage	K2251, C3051 OVHD, E3054 TUBE, V3051, P3051A/B, P3068A/B, E3055, V3151	Propane, N-Pentane (LPG)	8.72	REF	CCU	8.72	18, P2	
60L + 62	CCU-012 Wet Gas Compressor 2ND stage	K2251, C3051 OVHD, E3054 TUBE, V3051, P3051A/B, P3068A/B, E3055, V3151	Gasoline	1.01	REF	CCU	1.01	34a, P5a, E2	
61									

	Filming Amine CD4	Portable bulk tank	Philmodul S058E	6.5	REF	CD4	6.5	E2	Updated to add Suez chemical
	Wetting agents/solids removal CD4	IBC	BUR1010K-89	2.8	REF	CD4	2.8	E2, P5c	Updated to add Suez chemical
	Process Antifoam (P203)	IBC	Emulcol 2000	1	REF	CD4	1	P5c	
	Process Antifoam (P204)	IBC	BP14240x-79	1	REF	CD4	1	P5c	
	Process Antifoam (E308A)	IBC	Thermoflo 1018	10	REF	CD4	1	E2	Updated to add Suez chemical
	Acidifier CD4	IBC	Excilbur 7760	4.6	REF	CD4	4.6	NOT COMAH	Updated to add Suez chemical
	Scale inhibitor CD4	IBC	Prostatol M8220E	1.1	REF	CD4	2	NOT COMAH	Updated to add Suez chemical
	Brine polymer	IBC	Emulcol 204E	2	REF	CD4	2	NOT COMAH	Updated to add Suez chemical
67	Not listed	IBC	Klarad CB1432	2	REF	CD4	2	NOT COMAH	Updated to add Suez chemical
68	Not listed								
69 (T490A/5)	AROM-014 Hot oil system	T490A, T490S, E4117, E4101, E344A/B, E3222A/B, E3222A/B, E5607A/B, E5001, P5001, V5001	Hot Oil	13986	REF	AROM	11885	346, P5a, E1	IBP CONCAWE category starts at 160 deg C
	CD4 Emergency Dump Tank	T4163	Crude Oil	8000	REF	CD4	6000	P5a, E2	
	CD4 Emergency Dump Tank	T4164	Slurry	9000	REF	CD4	2000	P5a, E1	
	T4052	CCU feed	Long Residue	15,480	REF	CCU	13,600	346, E1	
	T4053	CCU feed	Long Residue	15,480	REF	CCU	13,600	346, E1	
	T4054	CCU feed	Long Residue	15,480	REF	CCU	13,600	346, E1	
71	HPBH Oxygen Scavenger	IBCs	BP85990-71	1.3	UTL	HPBH	1.3	NOT COMAH	Updated for Suez chemical
	SWS-001 Sour Water Feed	V5951, P5951A/B/C, E5951 TUB	Ammonia	0.7	UTL	SWS	0.7	E1	
	SWS-001 Sour Water Feed	V5951, P5951A/B/C, E5951 TUB	Hydrogen Sulphide	1.3	UTL	SWS	1.3	37, P2, H2, E1	
	SWS-001 Sour Water Feed	V5951, P5951A/B/C, E5951 TUB	Water	132.0	UTL	SWS	132.0	NOT COMAH	
	SWS-002 Sour Gas	C5951, C5961, E5951 AIR COOLER, V5952	Ammonia	0.004	UTL	SWS	0.004	P2, E1	Ammonia Gas to P2
	SWS-002 Sour Gas	C5951, C5961, E5951 AIR COOLER, V5952	Hydrogen Sulphide	0.01	UTL	SWS	0.01	37, P2, H2, E1	
	SWS-002 Sour Gas	C5951, C5961, E5951 AIR COOLER, V5952	Water	0.01	UTL	SWS	0.01	NOT COMAH	
	IBC - Corrosion Inhibitor	R81320	Water	1.00	UTL	SWS	1.00	E2	
	ADIP-001 ADIP Regenerator Overheads	C5801, E5803 AIR COOLER, V5802	CO2 and Water	0.3	UTL	ARU	0.3	NOT COMAH	
	ADIP-001 ADIP Regenerator Overheads	C5801, E5803 AIR COOLER, V5802	Hydrogen Sulphide	0.4	UTL	ARU	0.4	37, P2, H2, E1	
	ADIP-001A ADIP feed vessels	V5801, V5801	On-site produced amine in water	21.9	UTL	ARU	21.9	NOT COMAH	
	ADIP-001A ADIP feed vessels	V5801, V5801	Hydrogen Sulphide	0.2	UTL	ARU	0.2	37, P2, H2, E1	
	ADIP-001B ADIP off gas scrubber	C5802	Carbon Dioxide	0.130	UTL	ARU	0.130	NOT COMAH	
	ADIP-001B ADIP off gas scrubber	C5802	Hydrogen	0.000	UTL	ARU	0.000	E1	
	ADIP-001B ADIP off gas scrubber	C5802	Hydrogen Sulphide	0.001	UTL	ARU	0.001	37, P2, H2, E1	
	ADIP-001B ADIP off gas scrubber	C5802	Methane / Ethane	0.007	UTL	ARU	0.007	P2	
	ADIP-001B ADIP off gas scrubber	C5802	Propane / Butane / LPG	0.012	UTL	ARU	0.012	18, P2	
	ADIP-001B ADIP off gas scrubber	IBC	BP845140K	1.000	UTL	ARU	1.000	NOT COMAH	
	ADIP-001B ADIP off gas scrubber	V5954A/B	APS	40	UTL	ARU	50	H2	
72	SCOT-004 MDEA regenerator	E5956, C5754, E5758, V5755	Hydrogen Sulphide	0.0104	UTL	SCOT	0.0104	37, P2, H2, E1	
73	SCOT-004 MDEA regenerator	E5956, C5754, E5758, V5755	Carbon Dioxide	0.0295	UTL	SCOT	0.0295	NOT COMAH	
74	SCOT-004 MDEA regenerator	E5956, C5754, E5758, V5755	Nitrogen / Water	0.0017	UTL	SCOT	0.0017	NOT COMAH	
75	Not listed								
76	SRU-001 SRU Unit 5300	V5301B/C	Water	0.002	UTL	SRU	0.002	NOT COMAH	
77	SRU-001 SRU Unit 5300	V5301B/C	Ammonia	0.001	UTL	SRU	0.001	P2, E1	Ammonia Gas to P2
78	SRU-001 SRU Unit 5300	V5301B/C	Hydrogen Sulphide	0.002	UTL	SRU	0.002	37, P2, H2, E1	
79	SRU-001 SRU Unit 5300	V5301A	Water	0.002	UTL	SRU	0.002	NOT COMAH	
80	SRU-001 SRU Unit 5300	V5301A	Ammonia	0.001	UTL	SRU	0.001	E1	
81	SRU-001 SRU Unit 5300	V5301A	Hydrogen Sulphide	0.002	UTL	SRU	0.002	37, P2, H2, E1	
82	SRU-001 SRU Unit 5300	E5306, M5301, E5301, M5302, R5301, M5302A, M5303, R5302, E5302B, S5301	Hydrogen Sulphide	0.003	UTL	SRU	0.003	37, P2, H2, E1	
83	SRU-001 SRU Unit 5300	E5306, M5301, E5301, M5302, R5301, M5302A, M5303, R5302, E5302B, S5301	Sulphur Dioxide	0.003	UTL	SRU	0.003	H2	
84	SRU-001 SRU Unit 5300	E5306, M5301, E5301, M5302, R5301, M5302A, M5303, R5302, E5302B, S5301	Nitrogen	0.033	UTL	SRU	0.033	NOT COMAH	
85	SRU-001 SRU Unit 5300	E5306, M5301, E5301, M5302, R5301, M5302A, M5303, R5302, E5302B, S5301	Water	0.010	UTL	SRU	0.010	NOT COMAH	
86	SRU-001 SRU Unit 5300	E5306, M5301, E5301, M5302, R5301, M5302A, M5303, R5302, E5302B, S5301	Carbon Dioxide	0.003	UTL	SRU	0.003	NOT COMAH	
87	SRU-001 SRU Unit 5300	R5301, R5302	Azoxa CB3-7	16.00	UTL	SRU	16.00	NOT COMAH	
88	SRU-001 SRU Unit 5300	R5301, R5302	Percent Masep 740	2.00	UTL	SRU	2.00	NOT COMAH	
89	SRU-001 SRU Unit 5300	R5301, R5302	Criterion C-099	7.00	UTL	SRU	7.00	NOT COMAH	
90	SRU-001 SRU Unit 5300	E5509 TUB, M5501, E5501, E5502, M5502, R5501, E5503, M5503, R5502, S5501	Hydrogen Sulphide	0.003	UTL	SRU	0.003	37, P2, H2, E1	
91	SRU-001 SRU Unit 5300	E5509 TUB, M5501, E5501, E5502, M5502, R5501, E5503, M5503, R5502, S5501	Sulphur Dioxide	0.003	UTL	SRU	0.003	H2	
92	SRU-001 SRU Unit 5300	E5509 TUB, M5501, E5501, E5502, M5502, R5501, E5503, M5503, R5502, S5501	Nitrogen	0.032	UTL	SRU	0.032	NOT COMAH	
93	SRU-001 SRU Unit 5300	E5509 TUB, M5501, E5501, E5502, M5502, R5501, E5503, M5503, R5502, S5501	Water	0.010	UTL	SRU	0.010	NOT COMAH	
94	SRU-001 SRU Unit 5300	E5509 TUB, M5501, E5501, E5502, M5502, R5501, E5503, M5503, R5502, S5501	Carbon Dioxide	0.003	UTL	SRU	0.003	NOT COMAH	
95	SRU-001 SRU Unit 5300	R5501, R5502	Percent Masep 747	16.00	UTL	SRU	16.00	NOT COMAH	
96	SRU-001 SRU Unit 5300	R5501, R5502	Percent Masep 740	2.00	UTL	SRU	2.00	NOT COMAH	
97	SRU-001 SRU Unit 5300	R5501, R5502	Criterion C-099	7.00	UTL	SRU	7.00	NOT COMAH	
98	SRU-001 SRU Unit 5300	R5501, R5502	Hydrogen Sulphide	0.003	UTL	SRU	0.003	37, P2, H2, E1	
99	SRU-001 SRU Unit 5300	V5751A / V5751B / V5751C	Hydrogen Sulphide	0.0004	UTL	SCOT	0.0004	37, P2, H2, E1	
100	SCOT-001 SCOT quench column	F5751, M5751, R5751, C5751, E5751, S5751, E5751A/B	Hydrogen Sulphide	0.0004	UTL	SCOT	0.0004	37, P2, H2, E1	
101	SCOT-001 SCOT quench column	F5751, M5751, R5751, C5751, E5751, S5751, E5751A/B	Nitrogen	268.6	UTL	SCOT	268.6	NOT COMAH	
102	SCOT-001 SCOT quench column	F5751, M5751, R5751, C5751, E5751, S5751, E5751A/B	Water	91.4	UTL	SCOT	91.4	NOT COMAH	
103	SCOT-001 SCOT quench column	R5751	Criterion S34	10.0	UTL	SCOT	10.0	E1	
104	SCOT-001 SCOT quench column	E5752, C5752, V5752	Hydrogen Sulphide	0.004	UTL	SCOT	0.004	37, P2, H2, E1	
105	SCOT-001 SCOT quench column	E5752, C5752, V5752	Carbon Dioxide	0.027	UTL	SCOT	0.027	NOT COMAH	
106	SCOT-001 SCOT quench column	E5752, C5752, V5752	MDEA / W water	0.2	UTL	SCOT	0.2	NOT COMAH	
107	Not listed		Surge plant						other information added from existing reports
108	Not listed		neodol tanks						other information added from existing reports
109	Not listed		misc. light hydrocarbon products						other information added from existing reports
110	Not listed		deffin tanks						other information added from existing reports
111	Not listed		neodol and deffin tanks						other information added from existing reports
112	Not listed								
113	MPBH Oxygen Scavenger	IBC mother - daughter	BP85990-71	1.6	UTL	MPBH	1.6	NOT COMAH	Updated for Suez chemical
114	MPBH Dispensant	IBC mother - daughter	BP85990-71	2	UTL	MPBH	2	NOT COMAH	Updated for Suez chemical
115	MPBH Condensate Treatment	IBC mother - daughter	BP85990-71	2.5	UTL	MPBH	2.5	H2, P5c	
116	MPBH Condensate Treatment	IBC mother - daughter	BP85990-71	2.5	UTL	MPBH	2.5	NOT COMAH	Updated for Suez chemical
117	T4082	T4082	Long Residue	15,480	OMS	Black Oils	13,600	346, E1	
118	T4084	T4084	Long Residue	15,480	OMS	Black Oils	13,600	346, E1	
119	T4086	T4086	Long Residue	15,480	OMS	Black Oils	13,600	346, E1	
120	T4088	T4088	Fuel Oil / Slurry	11,800	OMS	Black Oils	10,400	346, E1	
121	T4089	T4089	HCO / Long Residue	12,000	OMS	Black Oils	10,900	346, E1, P5c	
122	T4091	T4091	Fuel Oil / Residue	12,000	OMS	Black Oils	0	346, E1	OD57
123	T4092	T4092	Fuel Oil / Residue	16,000	OMS	Black Oils	0	346, E1	OD57
124	T4093	T4093	Fuel Oil / Residue	16,000	OMS	Black Oils	0	346, E1	Out of Service (heat only)
125	T4094	T4094	Fuel Oil	5,500.0	OMS	Black Oils	255	346, E1	
126	T4095	T4095	Fuel Oil	8300	UTL	HPBH	4000	346, E1, P5c	
127	T4096	T4096	Slurry	2040	UTL	HPBH	1000	346, E1	
128	T4097	T4097	Nitrogen	0.014	REF	FLARE	0.0	NOT COMAH	Renamed node to FGM instead of FLA
129	T4098	T4098	Hydrogen	0.007	REF	FLARE	0.0	15, P2	Renamed node to FGM instead of FLA
130	T4099	T4099	LPG	0.079	REF	FLARE	0.1	18, P2	Renamed node to FGM instead of FLA
131	T4100	T4100	Gasoline	150	REF	FLARE	50.0	346, P5a, E2	
132	T4101	T4101	Nitrogen	0.8	REF	FLARE	0.8	NOT COMAH	
133	T4102	T4102	Hydrogen	0.1	REF	FLARE	0.1	15, P2	
134	T4103	T4103	LPG	1.1	REF	FLARE	1.1	18, P2	
135	T4104	T4104	Refinery Slugs	1040	REF	CD3 / 4	936	P5a, E1	
136	T4105	T4105	Alcohols effluent area	2,901	OMS	White Oils	0	346, E2, P5c	other information added from existing reports
137	T4106	T4106	Kerosene	2,901	OMS	White Oils	0	346, E2, P5c	Tank out of service
138	T4107	T4107	Kerosene	2,936	OMS	White Oils	0	346, E2, P5c	Tank out of service
139	T4108	T4108	Kerosene	2,936	OMS	White Oils	0	346, E2, P5c	Tank out of service
140	T4109	T4109	Lineval tanks						other information added from existing reports
141	T4110	T4110	Lineval tanks						other information added from existing reports
142	T4111	T4111	Lineval tanks						other information added from existing reports
143	T4112	T4112	Lineval tanks						other information added from existing reports
144	T4113	T4113	Lineval tanks						other information added from existing reports
145	T4114	T4114	Lineval tanks						other information added from existing reports
146	T4115	T4115	Lineval tanks						other information added from existing reports
147	T4116	T4116	Lineval tanks						other information added from existing reports
148	T4117	T4117	Lineval tanks						other information added from existing reports
149	T4118	T4118	Lineval tanks						other information added from existing reports
150	T4119	T4119	Lineval tanks						other information added from existing reports
151	T4120	T4120	Lineval tanks						other information added from existing reports
152	T4121	T4121	Lineval tanks						other information added from existing reports
153	T4122	T4122	Lineval tanks						other information added from existing reports
154	T4123	T4123	Lineval tanks						other information added from existing reports
155	T4124	T4124	Lineval tanks						other information added from existing reports
156	T4125	T4125	Lineval tanks						other information added from existing reports
157	T4126	T4126	Lineval tanks						other information added from existing reports
158	T4127	T4127	Lineval tanks						other information added from existing reports
159	T4128	T4128	Lineval tanks						other information added from existing reports
160	T4129	T4129	Lineval tanks						other information added from existing reports
161	T4130	T4130	Lineval tanks						other information added from existing reports
162	T4131	T4131	Lineval tanks						other information added from existing reports
163	T4132	T4132	Lineval tanks						other information added from existing reports
164	T4133	T4133	Lineval tanks						other information added from existing reports
165	T4134	T4134	Lineval tanks						other information added from existing reports
166	T4135	T4135	Lineval tanks						other information added from existing reports
167	T4136	T4136	Lineval tanks						other information added from existing reports
168	T4137	T4137	Lineval tanks						



PUBLIC

EET Fuels

Stanlow Hydrogen Ready Combined Heat and Power Project Development Consent Order

Volume 3, Appendix 19.1: Draft Long List of Other
Developments

02-09-2026

Document ref: 2026UK550445-ENV-001



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FIGURES

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1. Draft Long List of Other Developments

1.1 Introduction

- 1.1.1 This appendix presents the draft long list of Other Developments as shown in **Table 1**. This draft long list will be further developed and refined following comments from PINS and ahead of drafting the inter-project effects assessment in the Environmental Statement.

Table 1 Long List of Other Developments

ID	Application Reference	Description	NSIP/Local Authority	Distance from Proposed Development	Status	Tier
1.	EN0710001	Peak Cluster CCS Pipeline: Peak Cluster will deliver carbon capture and storage (CCS) infrastructure to decarbonise vital UK industry. A new high pressure pipeline network will convey carbon dioxide from new build carbon capture facilities to be constructed at existing lime and cement manufacturing sites in Derbyshire and Staffordshire to a coastal network exchange point and compressor station for onward transport to suitable geological carbon dioxide storage under the east Irish Sea. Carbon capture equipment at industrial sites and Above Ground Installations (AGIs) will be installed, along with other associated infrastructure.	NSIP	2.2km southwest	Pre-application	2
2.	EN060006	Hynet North West Hydrogen Pipeline: The Hynet North West Hydrogen Pipeline will convey hydrogen from the Stanlow production site to industrial users and to blending points at Partington and Warburton for introduction into the existing gas network. It will also connect with associated hydrogen storage facilities to help balance supply and demand on the pipeline. It is anticipated to consist of approximately 125km of underground high pressure steel pipeline with associated user connection spurs, together with a number of	NSIP	Adjacent southeast	Pre-application	2

ID	Application Reference	Description	NSIP/Local Authority	Distance from Proposed Development	Status	Tier
		Hydrogen Above Ground Installations along the route of the pipeline.				
3.	EN010153	Frodsham Solar Project: Solar photovoltaic array with an electrical generating capacity of over 50MW comprising solar PV modules and related mounting structures, inverters, transformers, switch gear and control equipment, a substation, and underground on and off-site cabling, as well as associated energy storage equipment.	NSIP	Access road partially overlaps near Pool Lane roundabout	Recommendation	1
4.	19/04561/OUT Non-material amendment application (24/02426/NMA) approved in October 2024.	Development of up to 500,000ft ² (46,450m ²) of B2/B8 use class floorspace, with ancillary offices, service yards, and all associated works including landscaping and car parking with all matters reserved for future consideration.	Cheshire West and Chester Council	6.0km northwest	Approved	1
5.	17/02582/OUT Most recent supporting application, a discharge of conditions (22/01437/DIS) approved in April 2022.	Outline application for up to 21,367sqm of B2/B8 (General industrial/Storage or Distribution) floorspace including ancillary B1(a) office space with details of access and associated works, all other matters reserved.	Cheshire West and Chester Council	4km northwest	Approved	1

ID	Application Reference	Description	NSIP/Local Authority	Distance from Proposed Development	Status	Tier
6.	12/02091/OUT Numerous discharges of conditions applications awaiting decision	Residential development of up to 2,000 homes, up to 400 sqm of retail floor space for a local shop, a new primary school, a community building, a new linear park, playing fields and other public open space, new allotments, together with new accesses, streets and other related infrastructure. (Outline Application) (NB minor change removing reference to conversion of existing farm buildings to residential).	Cheshire West and Chester Council	6.2km west	Appeal allowed	1
7.	20/03599/FUL	Land At Rossfield Park and Jacks Wood Jacks Wood Avenue Ellesmere Port Cheshire: Residential development, including provision of temporary sales area, and provision of formal and informal open space and associated works including highways and drainage works, pedestrian/cycle level rail crossing to Percival Road, enhancement works within Jacks Wood, together with improvements to footbridge approach on Ross Road following demolition of existing building.	Cheshire West and Chester Council	3.2km west	Approved	1
8.	23/03825/FUL	Land north of Dunkirk Way, Norwich Drive, Great Sutton, Ellesmere Port: Erection of 267no. dwellings with associated works.	Cheshire West and Chester Council	5.4km southwest	Awaiting decision	1
9.	20/00324/FUL	Land at Cable Drive Helsby Frodsham: Demolition of existing buildings and erection	Cheshire West and Chester Council	3km east	Approved	1

ID	Application Reference	Description	NSIP/Local Authority	Distance from Proposed Development	Status	Tier
		of 241 dwellings and apartments with access road and associated external works.				
10.	21/04091/FUL	Essar Energy Transition fuels: Stanlow Manufacturing Complex PO Box 3 Ellesmere Port CH65 4HB: Hybrid (full and outline) planning application for a hydrogen production plant, storage and distribution facility comprising full planning permission for the demolition of existing structures and erection of facilities including a Flare Stack, Phase 1 Process Area (containing main combustion plant), Natural Gas Let-down Area and Pipeline Reception Area for Phase 1 and Phase 2, and Pipe Racks, Utilities Area, new site access and internal access roads including new Gate House and Weighbridge Shelter, Surface Water Drainage System, landscaping and other associated infrastructure, and outline planning permission (matters of appearance, layout and scale reserved) for a Phase 2 Process Area, and Phase 1 and Phase 2 Air Separation Units, Oxygen and Nitrogen Storage Tanks, and other associated infrastructure Natural Gas Let-down Area for Phase 1 and Phase 2.	Cheshire West and Chester Council	Adjacent/within	Approved	1
11.	26/01255/REM	Details of reserved matters (appearance, layout and scale) for Air Separation Unit, Oxygen and Nitrogen Storage Tanks, and other associated infrastructure following	Cheshire West and Chester Council	Adjacent/within	Awaiting decision	1

ID	Application Reference	Description	NSIP/Local Authority	Distance from Proposed Development	Status	Tier
		outline approval under 21/04091/FUL – Hybrid located at Stanlow Refinery Oil Sites Road Ellesmere Port CH65 4BD				
12.	21/04076/FUL	Plots 9b, 10a, 11 and 12 Protos Grinsome Road Ellesmere Port CH2 4RB: Materials recycling facility, two plastics recycling facilities, a polymer laminate recycling facility and a hydrogen refuelling station.	Cheshire West and Chester Council	1.1km northeast	Approved	1
13.	21/03498/S73	Great Sutton Village Hall Old Chester Road Great Sutton Ellesmere Port CH66 3NZ: Demolition of existing buildings and erection of village hall, Scouts headquarters and medical centre including a range of healthcare facilities with retail pharmacy and cafe with associated car parking and improvements to existing football pitches (variation of condition 12 (phasing) on 18/04408/FUL).	Cheshire West and Chester Council	5.2km west	Approved	1
14.	19/03489/FUL	Area 10B Ince Resource Recovery Park Grinsome Road Ellesmere Port: Development of a hydrogen production facility and electricity generating plant, comprising of a waste reception and handling building, gasification facility, hydrogen production facility with associated/ ancillary infrastructure which includes access roads, weighbridge, fencing/gates, lighting, surface water drainage, and electricity distribution plant.	Cheshire West and Chester Council	1.3km northeast	Approved	1

ID	Application Reference	Description	NSIP/Local Authority	Distance from Proposed Development	Status	Tier
15.	22/00569/OUT	Heath Business and Technical Park and land north of Heath Road South, Runcorn Cheshire: Application for Outline Planning Permission (with all matters reserved for future consideration) at Heath Business and Technical Park and Land North of Heath Road South for: i. Up to 545 residential units including dwellinghouses (use class C3) and senior living and extra care (use class C2) with ancillary car and cycle parking; ii. Ancillary floorspace for flexible E use classes (including office, conference centre, retail, health provision, leisure [including food and beverage]), F2 use classes (meeting places for the local community and indoor pool), and a hotel (use class C1); iii. Sui generis uses including STEAM spaces, a drinking establishment and a vertical farm; iv. Principle of Highways access and servicing arrangements; and v. Infrastructure provision, inclusive of a new living machine (emerging wastewater treatment technology), and all other associated works including re-configuration of existing building on site, landscaping, public realm, and biodiversity improvements.	Halton Borough Council	7.6km northeast	Awaiting decision Called in by The Secretary of State 04/10/2026	1
16.	22/00423/OUTEIA	Land off Hale Gate Road Widnes Cheshire: Proposed hybrid planning application comprising; Full planning permission for the	Halton Borough Council	8.3km northeast	Approved	1

ID	Application Reference	Description	NSIP/Local Authority	Distance from Proposed Development	Status	Tier
		construction of the primary access points, primary internal link road and site enabling works including site levelling and Outline planning permission, with all matters reserved except for access, for the construction of up to 500 residential dwellings (use class C3), later living units (C2), a new primary school, a local centre (use class E) and associated infrastructure and open space.				
17.	19/00104/FUL	RSPCA Higher Road Halewood L26 9TX: Demolition of existing buildings and erection of 162 no. dwellings together with landscaping, infrastructure and associated works.	Knowsley Borough Council	8.8km north	Approved	1
18.	20/00063/FUL	Residential development for the erection of 413 No. dwellings comprising; Plot 2 (98 dwellings) - Land To North Of Railway Line Bounded By Lower Road Greensbridge Lane And Ditton Brook Watercourse, Halewood; And Plot 4 (315 dwellings) - Land To South Of Railway Line Bounded By Finch Lane, Baileys Lane And Higher Road, Halewood -	Knowsley Borough Council	8.9km north	Approved	1
19.	19/00521/HYB	Hybrid planning application for the erection of up to 730 dwellings. Plot 3 is within 10km of the Stanlow CHP site. Plot 3 – Land to South of railway line bounded by Lower Road, Finch Land and Bailey Lane, Halewood: Full planning application for the re-grading of the	Knowsley Borough Council	9.2km north	Approved	1

ID	Application Reference	Description	NSIP/Local Authority	Distance from Proposed Development	Status	Tier
		site, and the erection of 196 dwellings with associated works (including landscaping, access, roads and other associated infrastructure) and outline planning application for up to 386 dwellings (access to be considered). Subsequent reserved matters application 22/00466/REM – Application for approval of reserved matters pursuant to hybrid planning permission				
20.	24F/3393	New Mersey Shopping Park: To vary conditions 1, 2, and 3 attached to 18F/2852 (To vary condition 2 attached to 15F/0808 (To erect new cinema and restaurants following demolition of existing retail units, reconfigure the B&Q unit, erect new retail units, undertake shop front improvements, erect customer services centre, reconfigure car park and relocate substation, so as to allow existing retail allowances across the retail park to be applied flexibly) so as to provide for revised siting and configuration of new retail units and management suite (in 2 new buildings in the north western part of the existing car park) and revised public realm improvements, revised remodelling of part of northern terrace and eastern terraces, delete approved freestanding customer services centre and play area and revised reconfiguration of car park including the reduction in the number of	Liverpool City Council	7.9km north	Approved	1

ID	Application Reference	Description	NSIP/Local Authority	Distance from Proposed Development	Status	Tier
		approved publicly available parking spaces from 1762 to 1640) so as to reconfigure eastern terrace and associated servicing arrangements. Existing permission 15F/0808 and 18F/2852				
21.	24F/2752	4 Dakota Drive, Liverpool, L24 8RJ: Full planning application for a storage and distribution development (Use Class B8) comprising a warehouse building, ancillary (integral) offices, gatehouse, service yards and parking areas for HGVs, car parking, associated access and servicing including creation of a new vehicular access from Blackburne Street, new and enhanced landscaping, tree planting and other works including changes to existing landscaping mound and new boundary treatments, following demolition of existing buildings/ structures.	Liverpool City Council	7.2km north	Awaiting decision (Consultation complete)	1
22.	EN070007	Application by Liverpool Bay CCS Limited for an Order Granting Development Consent for the HyNet Carbon Dioxide Pipeline	NSIP	Adjacent/within	Approved	1
23.	Not submitted yet	Stanlow Industrial Carbon Capture Unit (Stanlow ICC)	Cheshire West and Chester Council	Adjacent	Currently paused	2

ID	Application Reference	Description	NSIP/Local Authority	Distance from Proposed Development	Status	Tier
24.	25/01339/FUL	Construction and operation of a solar photovoltaic (PV) farm with associated infrastructure and landscape and ecological enhancements for a temporary operational period of 40 years.	Cheshire West and Chester Council	1.3km southeast	Awaiting decision	3
25.	22/00398/FUL	Decommissioning of the existing 3 furnaces and demolition of the existing chimney and replacement with a new furnace (known as a CD4 furnace) and associated chimney and equipment (part retrospective)	Cheshire West and Chester Council	Adjacent	Approved	1
26.	25/00952/FUL	Construction of a new Carbon Dioxide Spur Pipeline, an Above Ground Installation (AGI) and ancillary equipment to serve Protos Resource Recovery Park located at Protos Resource Recovery Park Marsh Lane Ince	Cheshire West and Chester Council	1.5km east	Approved	1
27.	25/00293/FULEIA	Proposed construction of a new carbon dioxide spur pipeline, an Above Ground Installation (AGI), plus ancillary works and equipment to serve Viridor Energy from Waste (EfW) Facility Carbon Capture Plant at Runcorn Carbon Dioxide Spur Pipeline	Halton Borough Council	1km northeast	Awaiting decision Registered	2
28.	25/02108/FUL (same development as ID27 but submitted to a different planning authority)	Construction of a new Carbon Dioxide Spur Pipeline and Above Ground Installation (AGI) and ancillary equipment to serve the Viridor Energy from Waste (EfW) Facility Carbon Capture Plant	Cheshire West and Chester Council	1km northeast	Awaiting decision	2

ID	Application Reference	Description	NSIP/Local Authority	Distance from Proposed Development	Status	Tier
29.	24/00261/FUL	Full planning permission for the construction and operation of a post-combustion Carbon Dioxide (CO2) Capture Facility	Cheshire West and Chester Council	1.5km northeast	Approved	1
30.	16/03074/FUL	Erection of an Energy from Waste Facility (up to 35MW) and associated development including access and landscaping	Cheshire West and Chester Council	1.3km northeast	Approved	1
31.	20/04396/FUL	Resource recovery facility (Plastics Recycling Facility)	Cheshire West and Chester Council	1.3km northeast	Approved	1
32.	10/01488/FUL (incl. 14/02277/S73) (same development with Application Reference 24/01322/S73 - Removal of condition 17 (requirement to implement the first phase rail infrastructure prior to the occupation of plots within Protos Phase 2))	Protos Resource Recovery Park- Construction of the development commenced in 2016 with the build-out of Plot 3, Plot 9 and the associated substation, with activity continuing through to 2025, during which Plot 8 is currently under construction. For the purposes of the assessment, it is assumed that Plots 1, 2, 4, 5, 6, 7, 9b, 9c, 9e, 9f, 10a, 10b, 11, 12, 13, 14 and 15, together with the associated full rail link, are also likely to be under construction in some form during the forecast construction period of the CHP located at Ince Resource Recovery Park Grinsome Road Ellesmere Port Cheshire	Cheshire West and Chester Council	Adjacent northeast	Approved	2
33.	25/02041/DEM	Demolition of all buildings and structures following closure of the CF fertilisers plant. (These structures are shown on demolition plan ref. 4703251300-DRG-004, Rev A).	Cheshire West and Chester Council	1.6km east	Awaiting decision	2

ID	Application Reference	Description	NSIP/Local Authority	Distance from Proposed Development	Status	Tier
		located at CF Fertilisers UK Ltd Grinsome Road Ellesmere Port Cheshire CH2 4LB				
34.	24/02291/FUL	Extension of existing SPEN 132kV Substation and provision of a new access road and security fencing	Cheshire West and Chester Council	Adjacent, south	Awaiting decision	2
35.	18/04671/WAS	Development of a Bio-Substitute Natural Gas Renewable Fuels Facility	Cheshire West and Chester Council	1.4km northeast	Approved	1
36.	17/02683/FUL	To develop an electricity battery storage facility	Cheshire West and Chester Council	1.7km east	Approved	2
37.	19/02566/FUL	Erection of a 132KV/33KV/11KV primary substation with associated underground cables and mess buildings	Cheshire West and Chester Council	1.4km northeast	Approved	1
38.	22/00423/OUTEIA	Proposed hybrid planning application comprising; Full planning permission for the construction of the primary access points, primary internal link road and site enabling works including site levelling and Outline planning permission, with all matters reserved except for access, for the construction of up to 500 residential dwellings (use class C3), later living units (C2), a new primary school, a local centre (use class E) and associated infrastructure and open space at Land Off Hale Gate Road Widnes Cheshire	Halton Borough Council	8.7km north	Decided	1

ID	Application Reference	Description	NSIP/Local Authority	Distance from Proposed Development	Status	Tier
39.	25/00400/OUT	Outline planning application (with all matters other than access reserved) for a residential development of up to 240 dwellings at Land South Of Ditton Brook And East Of Hale Road Widnes	Halton Borough Council	9.5km Northeast	Registered	1
40.	14/04044/OUT	Residential development for up to 120 dwellings with open space, access and associated infrastructure (including the demolition of the existing buildings) (outline)	Cheshire West and Chester Council	3.2km southeast	Approved	2
41.	26/00142/FUL	Erection of 112 dwellings with public open space, landscaping, allotments, new vehicular access and other associated matters located at Land at Robin Hood Lane Helsby Frodsham	Cheshire West and Chester Council	3.7km east	Awaiting decision	1
42.	22/02572/REM	Erection of a seven-storey apartment building comprising 133 no. units including associated access, parking and landscaping works. Land At Premier House Charterhall Drive Chester Cheshire	Cheshire West and Chester Council	8.5km southwest	Approved	2
43.	25/03828/FUL	A Modular Hydrogen Ready Combined Heat and Power Plant consisting of 3 modules each comprising a Hydrogen Ready Gas turbine, demolition, and replacement of existing demineralised water plant located at Land At Stanlow Manufacturing Complex Poole Lane Thornton Le Moors Chester	Cheshire West and Chester Council	Adjacent	Awaiting decision	1

ID	Application Reference	Description	NSIP/Local Authority	Distance from Proposed Development	Status	Tier
44.	20/04850/OUT	Hybrid Planning Application for a gas engine electricity generating plant with a maximum generating capacity of 22.5MWe and Units for B2/B8 General Industrial / Storage and Distribution uses	Cheshire West and Chester Council	4.7km northwest	Approved	2
45.	26/01388/REM	Application for all outstanding Reserved Matters (appearance, landscaping, layout and scale) following outline permission under 20/04850/OUT (Hybrid Planning Application for a gas engine electricity generating plant with a maximum generating capacity of 22.5MWe and Units for B2/B8 General Industrial / Storage and Distribution uses)	Cheshire West and Chester Council	4.7km northwest	Awaiting decision	1
46.	26/00878/FUL	Full planning application concerning two independent parcels of land (Parcels A and B) involving: 1) Parcel A - full planning application for the erection of 126 dwellings, public open space and associated infrastructure works. 2) Parcel B - full planning application for the erection of 96 dwellings, public open space and associated infrastructure works Land At Chester Road Helsby Frodsham	Cheshire West and Chester Council	3.7km east	Awaiting decision	1
47.	26/00171/FUL	Installation of roofs to storage tanks located at Tanks T1993 and T1979 Stanlow Refinery Oil Sites Road Ellesmere Port	Cheshire West and Chester Council	320m north	Awaiting decision	1

ID	Application Reference	Description	NSIP/Local Authority	Distance from Proposed Development	Status	Tier
48.	23/03369/FUL	The installation of a new underground natural gas pipeline with ancillary above-ground infrastructure at either end of the pipeline, to supply Stanlow Manufacturing Complex located at Land To The South East of Stanlow Manufacturing Complex Thornton-le-Moor Ellesmere Port Cheshire	Cheshire West and Chester Council	Part of the site falls within the Proposed Development site, southeast	Approved	1

