

Intermodal Logistics Park North Ltd

INTERMODAL LOGISTICS PARK (ILP) NORTH

Intermodal Logistics Park (ILP) North Strategic Rail Freight Interchange (SRFI)

Project reference TR510001

Request for an EIA scoping opinion

Request by Intermodal Logistics Park North Ltd under Regulation 10 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

November 2024

Planning Act 2008

**The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017
Regulation 10**

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KEY PROJECT TERMS

1.1. Please use the following terms and abbreviations when preparing documents for the ILPN Rail Freight Interchange Development Consent Order application.

Full text	Acronym/ abbreviation	Notes
Intermodal Logistics Park North Ltd.	the Applicant	When referring to the 'Applicant'.
Intermodal Logistics Park North Rail Freight Interchange	ILPN RFI	When referring to the 'project'
Strategic Rail Freight Interchange	SRFI	
draft Order Limits		All of the land within the DCO application boundary as shown on the draft Order Limits Plan for the purposes of scoping.
The DCO Site		All of the land inside the draft Order Limits.
The Western Rail Chord of the DCO Site	the Western Rail Chord	Land to the west of the M6 motorway and to the east of the West Coast Mainline where the rail chord for the SRFI will be located.
The Main Site of the DCO Site	the Main Site	Land to the east of the M6 motorway, to the south of the Chat Moss Line and to the west of Winwick Lane incorporating the triangular parcel of land located to the west of Parkside Road and to the north of the Chat Moss Line.
Proposed Development		The development proposed in the DCO application.
The Parkside Link Road	PLR	The consented link road running between the A49 and M6 J22 which has been built but will not open until other works including to junction 22 of the M6 are completed – expected Spring 2025
Parkside West allocation	Parkside West	The land contained within the Parkside West allocation in the St Helens Local Plan, including land safeguarded for the

Full text	Acronym/ abbreviation	Notes
		SRFI.
Chat Moss Line		The railway line on the Liverpool to Manchester line serving the DCO Site.
West Coast Mainline		The railway line serving the DCO Site north to south connecting London to Glasgow with branches to other major cities.
Rail Terminal		All rail aspects and services within the SRFI, comprising the rail associated buildings, reception sidings and the components contained within the Intermodal Terminal.
Intermodal Terminal		The areas and uses that relate specifically to the movement of containerised freight, comprising the container yard, tracks under the gantry, offices, gatehouse, parking and roadways.
Rail served		A building that is able to handle goods moving to and from the rail terminal using special vehicles but is not directly connected to the railway.
Rail connected		A building that has a direct rail connection, i.e. a physical railway connection direct to the building.
National Policy Statement for National Networks	NPSNN	The overarching planning policy for nationally significant infrastructure projects on road, rail and strategic rail freight interchanges (SRFI).
Infrastructure Planning (Environmental Impact Assessment) Regulations 2017	the EIA Regulations	The regulatory mechanism for the process of environmental impact assessment (EIA) governing infrastructure planning in England
Short term effects		Temporary effects related to a specific construction event of no more than a year's duration – such as the construction of an individual building or a specific element of infrastructure such as a section of road.
Medium term effects		Temporary effects of longer duration, such as those arising over an extended period of construction ranging from one year to the full construction period, envisaged to be ten years.
Long term effects		Permanent effects arising from the operation of the SRFI or from the permanent presence or removal of physical

Full text	Acronym/ abbreviation	Notes
		features.

GLOSSARY AND ABBREVIATIONS

- 1.2. Please use the following terms and abbreviations when preparing documents for the ILPN RFI Development Consent Order application.

Full Text	Acronym/ Abbreviation	Notes
Above Ordnance Datum	AOD	Height of land surface above sea level.
Additionality		The extent to which something happens as a result of an intervention that would not have occurred in the absence of the intervention.
Agricultural Land Classification	ALC	The grading system used to assess and compare the quality of agricultural land in England and Wales
Air Quality Assessment	AQA	An assessment undertaken where a proposed development may be impacted by, or impacts on, air quality levels.
Air Quality Limit Value Regulations 2010	-	UK regulations to limit the levels of air borne pollutants emitted from industries.
Air Quality Management Area	AQMA	An area designated as being at risk of not meeting air quality standards by a local authority.
Air Quality Management Plan	AQMP	A plan developed to improve the air quality in the air quality management area.
Air Quality Modelling and Assessment Unit	AQMAU	An Environment Agency team that targets air quality related issues.

Full Text	Acronym/ Abbreviation	Notes
Air Quality Strategy	AQS	The AQS for England, Scotland, Wales and Northern Ireland provides details of national air quality standards and objectives for a number of local air pollutants.
Ancient Woodland	-	A woodland that has existed continuously since 1600 or before.
Annual Average Daily Traffic	AADT	Measurement unit for the total volume of vehicle traffic to indicate how busy the road is.
Annual Average Flow Rate for surface water runoff	QBAR	The peak flow rate from a catchment for the mean annual flood (the average annual flood event recorded in a river).
Annual Average Weekday Traffic	AAWT	Measurement unit for the total volume of vehicle traffic, weekdays only, on a road or motorway for a year divided by the number of weekdays in the year
Application	-	The DCO application for the Scheme made to the Secretary of State under the Planning Act 2008.
Applications: Prescribed Forms and Procedure Regulations	APFP	The Infrastructure Planning Regulations 2009, as amended, which prescribe various matters in connection with the making of an application for development consent under the Planning Act 2008.
Asbestos Containing Material	ACM	Any material containing more than 1% asbestos.
Automatic Traffic Count	ATC	Means of determining traffic levels in the vicinity.
Automatic Urban and Rural Network	AURN	Air quality monitoring site.
B8	B8	Storage and distribution uses (a classification of uses under the Town and Country Planning Order 1987)

Full Text	Acronym/ Abbreviation	Notes
Best and Most Versatile Agricultural Land	BMV	Agricultural land within Grades 1, 2 and Subgrade 3a of the ALC
Best Available Technique	BAT	'Best available techniques' (BAT) means the available techniques which are the best for preventing or minimising emissions and impacts on the environment for an industrial installation which operates under an Environmental Permit.
Biodiversity Action Plan	BAP	Plan concerned with the protection of identified species and habitats.
Biodiversity Net Gain	BNG	An approach to development that obligates developers to contribute to the recovery of nature while developing land by leaving biodiversity in a measurably better state than before the development took place
British Geological Survey	BGS	The UK public body responsible for all aspects of geoscience.
BS 4142	-	Method for Rating Industrial Noise Affecting Mixed Residential and Industrial Areas (1997).
BS 8233	-	Guidance on sound insulation and noise reduction for buildings (2014).
BS5228	-	Code of Practice for Noise and Vibration Control on Construction and Open Sites 2009 (2009).
BS5873	-	Guidance in relation to trees and design, demolition and construction
CadnaA	-	Noise modelling software

Full Text	Acronym/ Abbreviation	Notes
Candidate Local Wildlife Sites	cLWS	Wildlife rich sites nominated for their local nature conservation value.
CAoL Guidance	-	Department of Communities and Local Government guidance 'Planning Act 2008: Guidance related to procedures for the compulsory acquisition of land' (September 2013).
Carbon Dioxide	CO ₂	Not carbon. A primary greenhouse gas emitted through human activities as well as natural sources.
Carbon Dioxide equivalent	CO ₂ -eq	A metric measure used to compare the emissions from various greenhouse gases on the basis of their global warming potential (GWP) by converting other amounts of gases to the amount of carbon dioxide with the equivalent global warming potential.
Carbon Monoxide	CO	A pollutant gas generated by combustion sources where carbon in fuel is not fully oxidised - a trace component of vehicle emissions, more particularly for older vehicles.
Chamber of Commerce	CoC	A network of businesses to represent business interests.
Civil Aviation Authority	CAA	A statutory corporation that oversees and regulates civil aviation in the UK.
Classified Turning Counts	CTC	Measurement of vehicle traffic in particular at junctions.
Coal Authority	-	A non-governmental body that manages coal mining operations and coal reserves throughout the UK.
Code of Construction Practices	CoCP	A guidance document that sets out standards and procedures for managing environmental impact of constructing major schemes.

Full Text	Acronym/ Abbreviation	Notes
Commercial and Industrial waste	C&I	A type of waste from businesses that does not include construction and demolition waste.
Committee on the Medical Effects of Air Pollutants	COMEAP	An advisory body that advises the UK government on all matters concerning the health effects of air pollutants.
Common Bird Census	CBC	A standardised methodology to map breeding bird territories.
Conceptual Site Model	CSM	A model that identifies the possible pathways by which a contaminant from a particular source can affect a particular receptor.
Conservation Areas	CA	An area of special architectural and historic interest designated by the local planning authority.
Conservation of Habitats and Species Regulations 2017	Habitats Regulations	
Construction and Demolition Waste	C&D	A type of construction waste as identified by the Environment Agency.
Construction Environmental Management Plan	CEMP	A document which specifies the overarching principles and measures to manage and mitigate the effects of the activities associated with the construction of the Proposed Development. It will also ensure that construction activities cause minimum disruption to people, businesses and the environment.
Construction Industry Research and Information Association	CIRIA	-
Construction Stage	-	The construction stage of the Scheme begins with enabling works, which will include site set-up and groundworks.

Full Text	Acronym/ Abbreviation	Notes
Construction Traffic Management Plan	CTMP	A document which ensures that the impacts of construction traffic movements associated with the Proposed Development are managed in a manner that minimises negative impacts on existing highway users, highway infrastructure and the wider environment.
Construction Travel Plan	CTP	A plan by the construction contractor for managing staff travel during the construction stage of a project (e.g. car sharing, public transport) that is submitted to the relevant Highway Authority for approval.
Contaminated Land Exposure Assessment	CLEA	A tool to help assess the risks of contaminated land exposure for human health
Cumulative Effects Assessment	CEA	The process to assess the combined effects of a proposed development in conjunction with other existing and/or approved developments
dB(A)	-	A-weighted decibel – a correction applied to each frequency between 20 Hz and 20 kHz that effectively represents the way the human ear works.
Deadweight	-	An estimate of what level of target outputs/outcomes would be produced if the intervention did not go ahead.
Decibel	dB	Logarithmic scale for measuring sound levels.
Department for Environment, Food and Rural Affairs	DEFRA	The UK Government department responsible for environmental protection, food production and standards, agriculture, fisheries and rural communities in the UK.
Department for Transport	DfT	Government department responsible for transport.
Deposition	-	The main pathway for removing pollutants from the atmosphere, by settling on land.

Full Text	Acronym/ Abbreviation	Notes
Design Manual for Roads and Bridges	DMRB	A suite of technical documents produced by the Highways Agency that include guidance for environmental appraisal that are also used for non- highways schemes and as such are commonly used in EIA.
Desk Based Assessment	DBA	Assessment undertaken using internet or offline sources, i.e. not in the field.
Determinand	-	A substance or parameter that is determined analytically, e.g. arsenic concentration in soil, pH of water, concentration of a particular gas in air quality modelling.
Development Consent Order	DCO	An order made under the Planning Act 2008 granting development consent for a Nationally Significant Infrastructure Project
Development Plan Documents	DPD	Includes the relevant documents for St Helens and Wigan
Digital Surface Model	DSM	A 3-dimensional computer model that represents the elevation of terrain and above-ground objects.
Discretionary Advice Service	DAS	Service offered by Natural England with regard to consultation.
Displacement	-	The proportion of intervention outputs accounted for by reduced outputs elsewhere in the target area.
Ecological Construction Method Statement	ECMS	A method statement to demonstrate how any ecological risk will be mitigated during the construction phase
Ecological Impact Assessment	EclA	The process through which the potential impacts resulting from a project are identified, quantified, and assessed through appropriate ecological surveys
Ecological Mitigation and Management Plan	EMMP	A document setting out the measures required during the construction phase to protect and mitigate the impacts that have been identified through the assessment on the ecological

Full Text	Acronym/ Abbreviation	Notes
		receptors.
Electric and Magnetic Fields	EMF	EMF's comprise electric and magnetic fields. Electric fields are the result of voltages applied to electrical conductors and equipment. Magnetic fields are produced by the flow of electric current.
Emission	-	The direct or indirect release of substances, vibrations, heat or noise from individual or diffuse sources into air, water or onto land, e.g. pollution may be discharged into the atmosphere from a stack or vent.
Emission Limit Value	ELV	Legal enforcement limit on the physical, chemical or biological characteristics of a point source of emission to water or air.
Energy Efficiency Directive 2012	-	The Directive establishes a framework of measures for the promotion of energy efficiency within the European Union.
English Heritage Archives	EHA	A public archive of architectural and archaeological records.
Environment Agency	EA	The non-departmental government body responsible for protection and enhancement of the environment in England and Wales.
Environmental DNA testing	eDNA	An recognised survey technique for establishing the presence or absence of great crested newts in ponds during the breeding season
Environmental Health Officer	EHO	A local authority health professional responsible for carrying out measures for protecting public health.
Environmental Impact Assessment	EIA	The process of evaluating the likely significant environmental impacts of a proposed project or development as part of the planning process.
Environmental Permit	EP	A permit required in accordance with the Environmental Permitting Regulations.

Full Text	Acronym/ Abbreviation	Notes
Environmental Permitting Regulations	EPR	The Environmental Permitting (England and Wales) Regulations 2010 (SI 2010/675) as amended that regulates practices that have pollution potential through a permitting system.
Environmental Protection Act 1990	EPA	The Act that covers, amongst other things, the regulation of contaminated land in the UK.
Environmental Quality Standards	EQS	The concentration of a particular pollutant or group of pollutants in water, sediment or biota which should not be exceeded in order to protect human health and the environment.
Environmental Statement	ES	The document which reports the process, findings and recommendations of the EIA carried out to assess the environmental impacts of the Scheme informed by the Scoping Opinion.
Environmentally Sensitive Area	ESA	A designation for agricultural areas needing special protection by virtue of their landscape, wildlife or historical value.
Flood Defence Consent	FDC	A consent required by the Environment Agency, for construction or maintenance work on over, under or near a main river (usually within 8-10 metres).
Flood Risk Assessment	FRA	An assessment that determines the risk of flooding to a proposed project.
Freight Market Study	FMS	Network Rail Study from October 2013 setting out annual average growth forecasts for the intermodal subsectors.
Full Time Equivalent	FTE	The equivalent number of full time jobs provided by a project - e.g. two half-time jobs equates to one FTE.
Functional Economic Market Area	FEMA	Area not constrained by administrative boundaries, but reflecting the way the economy works.
Generic Assessment Criterion	GAC	An integral part of the risk assessment process for land affected by contamination

Full Text	Acronym/ Abbreviation	Notes
Governance for Rail Investment Projects	GRIP	Network Rail's delivery mechanism for projects on operational railways.
Great Crested Newt	GCN	A species of newt protected by European Legislation.
Greater Manchester Historic Environment Record	GMHER	Archaeological dataset for the Greater Manchester area
Green Infrastructure	GI	A network of multi-functional green space and other green features, which can deliver quality of life and environmental benefits
Gross External Area	GEA	Measure of floorspace, measured externally at each floor level, including perimeter walls and external projections
Gross Internal Area	GIA	Measure of floorspace, measured to the internal face of the perimeter walls at each floor level.
Gross Value Added	GVA	Gross value added is the measure of the value of goods and services produced in an area, industry or sector of an economy.
Groundwater Source Protection Zone	GSPZ	Areas around groundwater abstraction sources that are defined in order to help protect drinking water from contamination.
Guidance for the Environmental Assessment of Road Traffic	GEART	The IEMA guidance on the environmental assessment of road traffic.
Guidance on Transport Assessment	GTA	Department for Transport guidance dated March 2007 on the preparation of Transport Assessments as archived 22 October 2014 and replaced by NPPG "Transport evidence bases in plan making"
Guidelines for Landscape and Visual Impact Assessment, 3rd Edition	GLVIA	Guidance produced by the Landscape Institute and the Institute for Environmental Management and Assessment dated 17 April 2013

Full Text	Acronym/ Abbreviation	Notes
Habitat Regulations Assessment	HRA	An assessment required under the European Directive 92/43/EEC.
Habitat Suitability Index	HSI	A method for assessing the suitability of ponds for their potential to support Great Crested Newts.
Health and Safety Executive	HSE	The non-departmental government body responsible for workplace safety in the UK.
Health Impact Assessment	HIA	A tool to identify and optimise the potential health and wellbeing effects of a policy, programme or project on a population
Heavy Goods Vehicle	HGV	A truck with a gross combination mass of more than 3500 kg.
Hectare	Ha	Unit of measurement equivalent to 100 acres.
Highway Authority	HA	The relevant body responsible for the non-core road network (i.e. roads other than trunk roads and motorways), usually the county council in two-tier authority areas.
Historic England	EH	The executive non-departmental public body that advises the public and other bodies on the care of the historic environment in England.
Historic Environmental Record	HER	The record held by the local planning authority of known archaeological sites, buildings and landscapes of relevance to the historic environment.
Historic Landscape Characterisation	HLC	A tool to identify and interpret the varying historic character within an area that looks beyond individual heritage assets incorporating landscape and townscape
Homes England	HE	The government’s housing, land and regeneration agency and the regulator of social housing providers in England.

Full Text	Acronym/ Abbreviation	Notes
Housing and Economic Needs Assessment	HEDNA	Report evaluating the future housing needs, the scale of future economic growth and the quantity of land and floorspace required for economic development.
Housing Market Area	HMA	Geographical area beyond administrative boundaries defined by household demand and preferences for all types of housing.
Hover	-	An otter's day nest or resting site.
Indices of Multiple Deprivation	IMD	An index to measure deprived areas in the wards of English local authorities.
Industrial Emissions Directive	IED	EU Directive on industrial emissions.
Institute of Acoustics	IOA	Professional body for Acoustics, Noise and Vibration professionals.
Institute of Air Quality Management	IAQM	IAQM is a professional body for air quality professionals.
Institute of Environmental Management and Assessment	IEMA	IEMA is a professional body for environmental professionals that provides industry guidance on many topics including EIA.
Integrated Pollution Prevention and Control Directive	IPPC	The EU Directive (2008/1/EC) incorporated into UK law by the Environmental Permitting Regulations on prevention and control of industrial emissions. The Directive aims to achieve a high level protection of the environment through measures to prevent or, where that is not practicable, to reduce emissions to air, water and land from activities listed in Annex I of the Directive
ISO 9613-2	-	Acoustics- Attenuation of sound during propagation outdoors – Part 2: General method of calculation.

Full Text	Acronym/ Abbreviation	Notes
Job Seekers Allowance	JSA	Unemployment benefit claimed while looking for work.
Joint Nature Conservation Committee	JNCC	The public body that advises the UK government and devolved administrations on UK-wide and international nature conservation.
Kilovolt	kV	A measure of electrical potential.
LA10	-	A-weighted noise level exceeded for 10% of the measurement period.
LA90	-	A-weighted noise level exceeded for 90% of the measurement period.
LAeq	-	A-weighted equivalent continuous sound level.
LAmax	-	A-weighted maximum sound pressure level recorded over a given period.
Land Plan	-	The plan showing the land required for the Scheme which is to be the subject of the power to acquire new rights, to extinguish or suspend existing rights and/or impose restrictive covenants submitted with the Application.
Landscape and Visual Impact Assessment	LVIA	The assessment of landscape and visual effects from the Proposed Development
Landscape Character Area	LCA	Geographically unique areas of the area where a combination of factors such as topography, vegetation pattern, land use and cultural associates combine to create an area with a distinct, recognisable character.

Full Text	Acronym/ Abbreviation	Notes
Landscape Character Assessment	LCA	An assessment used to understand and articulate the character of a landscape, by identifying what give a locality it's 'sense of place' and what makes it different from neighbouring areas carried out pursuant to the Landscape Character Assessment Guidance for England and Scotland.
Landscape Character Assessment Guidance for England and Scotland	LCAG	Guidance on Landscape Character Assessment issued by The Countryside Agency (now Natural England) and Scottish Natural Heritage dated 2002.
Landscape Character Types	LCT	The distinct, recognisable and consistent pattern of elements in the landscape.
Landscape Ecological Management Plan	LEMP	A document to provide processes and instructions for the management and operations of a site to ensure the protection and enhancement of the ecology and biodiversity on, and around, a development site.
Lead	Pb	
Lead Local Flood Authority	LLFA	The authority responsible for developing, maintaining and applying a strategy for local flood risk management in their areas and maintaining a register of flood risk assets.
Leakage	-	The proportion of outputs that benefit those outside of the intervention's target area.
Light Goods Vehicle	LGV	Vehicles with a gross weight less than 3.5 tonnes.
Listed Building		A building that has been placed on the statutory list of buildings of Special Architectural or Historic Interest and protected by the Planning (Listed Building and Conservation Areas) Act 1990 (as amended).
Local Air Quality Management Technical Guidance	LAQM TG	A tool used by local authorities to support them in carrying out their duties under the Environment Act 1995 as amended by the Environment Act 2021.

Full Text	Acronym/ Abbreviation	Notes
Local Development Framework	LDF	A spatial planning strategy introduced by the Planning and Compulsory Purchase Act 2004.
Local Enterprise Partnership	LEP	A voluntary partnership between local authorities and businesses responsible for setting strategic direction and implementation of economic development.
Local Nature Reserve	LNR	Statutory designation for places with wildlife or geological features that are of special interest locally.
Local Transport Plan	LTP	A plan by a local Highway Authority that sets out a strategy for the future of transport in its area.
Local Wildlife Site	LWS	Wildlife rich sites selected for their local nature conservation value.
Lowest Observed Adverse Effect Level	LOAEL	The lowest level observed to cause harm on health and quality of life in relation to noise.
Made Ground	-	Man-made deposits artificially placed comprising a wide variety of material e.g. concrete, brick etc - typical of previously developed sites.
Maintenance	-	Maintenance can comprise inspections, repair, adjustments or alterations, removal, refurbishments, reconstruction, replacements and improvements.
Manual for Streets	MfS	The guidance produced by the Department for Transport and Department for Communities and Local Government on road layout and balancing the needs of different road users, with a focus on residential roads.
Merseyside Historic Environment Record	MHER	Archaeological dataset for the Merseyside area

Full Text	Acronym/ Abbreviation	Notes
Ministry of Housing, Communities and Local Government (formerly Department for Levelling Up, Housing and Communities)	MHCLG	The ministerial department focused on housing, communities and local government.
Multi Agency Geographical Information for the Countryside	MAGIC	A web-based mapping browser showing various geographical designations e.g. nature conservation sites, heritage sites.
Multiplier effects	-	Further economic activity (jobs, expenditure or income) associated with additional expenditure and supplier purchases.
National Air Quality Objectives	NAQOs	Air quality limit and target values for the protection of human health set by the government.
National Character Area	NCA	Distinct natural areas of England, defined by a unique combination of landscape, biodiversity, geodiversity and cultural and economic activity.
National Cycle Network	NCN	A network of signed and promoted cycle routes across the UK.
National Grid Company	NGC	National Grid's principal operations are the ownership and operation of regulated electricity and gas infrastructure networks.
National Heritage List for England	NHLE	A list of statutory designated heritage assets in England
National Highways	NH	The agency of the Department for Transport responsible for the core road network in England (formerly the Highways Agency and Highways England).
National Monuments Record	NMR	Currently known as English Heritage Archive.
National Nature Reserve	NNR	Statutory designations, where places with wildlife or geological features that are significant at a national level.

Full Text	Acronym/ Abbreviation	Notes
National Planning Policy Framework	NPPF	The National planning policy framework for England.
National Planning Practice Guidance	NPPG	The Planning Practice Guidance web based resource for England first introduced in March 2014 (and which largely superseded planning policy statements (PPSs)) providing guidance on National planning policy and the operation of the planning system
National Policy Statements	NPS	Overarching legislative policy concerning the planning and consenting of NSIPs in the UK.
Nationally Significant Infrastructure Project	NSIP	As defined by the Planning Act 2008.
Natural England	NE	The non-departmental government body responsible for England's natural environment.
Nitrate Vulnerable Zone	NVZ	A designated area where land drains into and contributes to nitrate found in nitrate-polluted waters.
Nitrogen Dioxide	NO ₂	A gas formed during the combustion process typically associated with road traffic emissions.
Nitrous oxides	NO _x	A collective term for nitric oxide (NO) and nitrogen dioxide (NO ₂)
Noise Policy Statement for England	NPSE	Policy that sets out the long term vision of government noise policy.
Noise Sensitive Receptor	NSR	Receptors principally residential dwellings (existing or for which planning consent is being sought/ has been given) and any building used for long term residential purposes (such as nursing home).

Full Text	Acronym/ Abbreviation	Notes
Non-Technical Summary	NTS	The non-technical summary of the Environmental Statement.
Okta	-	A unit used in expressing the extent of cloud cover, equal to one eighth of the sky.
Operation	-	The routine day to day functioning of the Proposed Development
Order	-	The Development Consent Order (DCO)
Ordnance Survey	OS	National mapping agency for Great Britain
Otter Faeces	Spraint	-
Overhead Line	OHL	Network of overhead electricity transmission lines
Ozone	O ₃	A pollutant gas found in the atmosphere
Part II A	-	The section of EPA 1990 that deals with contaminated land.
Particulate Matter	PM	Very small solid particles.
Pathway	-	The route by which contamination moves from a source to a given receptor.

Full Text	Acronym/ Abbreviation	Notes
Peak Particle Velocity	PPV	A term used to measure vibration through a solid surface. When a vibration is measured, the point at which the measurement takes place can be considered to have a particle velocity.
Percentage Heavy Goods Vehicles	%HGV	Percentage of traffic that is classified as Heavy Goods Vehicles in a 16hr period.
Permitted Development	-	Development that is deemed under legislation to have planning consent without the need to obtain planning permission.
Personal Protective Equipment	PPE	Equipment a person may wear to protect themselves from risks e.g. high-visibility jackets, gloves, steel toe capped boots.
Planning Act 2008	PA 2008	England and Wales legislation which established the legal framework to apply for, examine and determine applications for Nationally Significant Infrastructure Projects.
Planning Inspectorate	PINS	Executive agency supported by the Department for Communities and Local Government which deals with planning appeals, national infrastructure, planning applications, examinations of local plans and other planning related and specialist casework in England and Wales.
Pollution Prevention Guidance	PPG	Environment Agency published guidance on pollution prevention and best practice.
Potential Contaminant Linkages	PCL	The existence of a contamination source and a receptor where a pathway is also present linking the two.
Potential Local Wildlife Sites	pLWS	Wildlife rich sites with potential to be selected for their local nature conservation value.
Preliminary Environmental Information Report	PEIR	A report describing the preliminary environmental assessment during the pre-application process of an NSIP.

Full Text	Acronym/ Abbreviation	Notes
Protection of Badgers Act 1992	-	
Public Right of Way	PRoW	Paths on which the public have legally protected rights to pass.
Rail Bridge 104	-	The bridge known Railway Bridge 104 crossing the West Coast Mainline Railway at Grid reference SJ 891 371.
Rail Terminal		Location within the ILP North Site where the trains will terminate
Receptor	-	An identified aspect of the environment - e.g. a resident, protected species, heritage asset, controlled water etc - that may be affected by the Scheme and, as such, has been assessed as part of the EIA undertaken.
Regional Distribution Centre	RDC	
Registered Parks and Gardens	-	Gardens and designed landscapes of special architectural and historic importance, placed on a national register by Historic England.
Remediation	-	The clean up of contaminated soil to make it suitable and safe for future use.
Resource Management Plan	RMP	A document setting out how resources will be managed during the construction process of a project.
River Basin Management Plan	RBMP	A management tool created by Environment Agency to use for integrated water resources management.
Scheduled Ancient Monument	SAM	A "nationally important" archaeological site or historic building, protected under the Ancient Monuments and Archaeological Areas Act 1979.

Full Text	Acronym/ Abbreviation	Notes
Scoping Opinion	-	The Scoping Opinion provided by the Secretary of State.
Secretary of State	SoS	The decision maker for a NSIP application and head of the relevant government department.
Significant Observed Adverse Effect Level	SOAEL	The level above which significant adverse effects on health and quality of life occur in relation to noise.
Site of Nature Conservation Interest	SNCI	Non-statutory areas of local importance for nature conservation.
Site of Special Scientific Interest	SSSI	A geological or biological conservation designation denoting a protected area in the UK.
Site Waste and Materials Management Plan	SWMMP	The strategic document dealing with the effective management of materials used for the construction and the operation of the Scheme ensuring that waste is considered at all stages of the Scheme.
Soil Guideline Values	SGV	A tool to assist risk assessors in determining unacceptable chronic risks (long-term) to human health from contamination.
Sound Power Level	SWL	The Sound Energy flow per unit of time.
Sound Pressure Level	SPL	Logarithmic measure of the sound pressure of a sound relative to a reference value, the threshold of hearing.
Special Area of Conservation	SAC	Area of protected habitats and species as defined in the European Union's Habitat Directive (92/43/EEC).
Special Landscape Areas	SLA	Local designation to provide protection for locally significant and attractive landscapes.

Full Text	Acronym/ Abbreviation	Notes
Special Protection Area	SPA	A designated area for birds under the European Union Directive on the Conservation of Wild Birds (2009/147/EC)
Square feet	Sqft	Unit of area
Square meters	Sqm	Unit of area
Statement of Common Ground	SoCG	A written statement containing factual information about the project that records where the applicant and other interested party have common ground and agreement on issues, and where there are matters where differences remain.
Statement of Community Consultation	SoCC	A statement describing how an applicant proposes to consult the local community about a project.
Strategic Rail Freight Interchange	SRFI	Large multi-purpose freight interchange and distribution centre linked to both the rail and trunk road systems
Sustainable Drainage Systems	SuDS	Systems that are designed to manage surface water run off as close to source as possible and to mimic natural processes to reduce the effect on the quality and quantity of run off from developments.
Sustainable Transport Strategy	STS	A plan to promote and create opportunities and mechanisms to enable walking, cycling, public transport and bike, car and ride sharing in preference to single occupancy car use.
Transport Analysis Guidance	TAG	Guidance from the Department for Transport on how to assess transportation schemes.
Transport Assessment	TA	A comprehensive and systematic process that sets out transport issues related to a proposed development.

Full Text	Acronym/ Abbreviation	Notes
Tree Preservation Order	TPO	A written order made by the local authority which makes it an offence to intentionally damage or remove a tree protected by that order without the authority's permission.
UK Climate Projections	UKCP	A set of tools and data that indicates how the UK's climate may change in the future.
UK Drinking Water Standards	DWS	
Unacceptable Adverse Effect Level	UAEL	The level at which noise is considered to be 'very disruptive' and should be 'prevented' in accordance with the Planning Practice Guidance for noise.
Unemployment	-	All people aged 16+ without a job who were available to start work in the two weeks following their interview and who had either looked for work in the four weeks prior to interview or were waiting to start a job they had already obtained.
Unexploded Ordnance	UXO	Explosive weapon that did not detonate and pose a risk of detonation.
United Nations Economic Commission for Europe	UNECE	Organisation providing medical and scientific evidence of health risks to the general public and recommended concentration limits.
Valuation Office Agency	VOA	Executive agency of His Majesty's Revenue and Customs. The Agency values properties for the purpose of Council Tax and for non-domestic rates in England and Wales.
Waste (England & Wales) Regulations 2011	-	Legislations for the waste prevent, management and introduction of waste hierarchy. The regulations apply to England and Wales only.
Water Framework Directive	WFD	The Water Framework Directive is a European Union directive which commits EU member states to achieve good qualitative and quantitative status of all water bodies.

Full Text	Acronym/ Abbreviation	Notes
Water Resources Act 1991	WRA	Legislation to prevent and minimise pollution of water.
Weighted Sound Reduction Index	Rw	Single-number quantity which characterises the airborne sound insulation of a material or building element over a range of frequencies when tested in a laboratory.
West Coast Mainline	WCML	The railway line serving the site north to south connecting London to Glasgow with branches to other major cities
Wild Mammals (Protection) Act 1996	-	
Wildlife and Countryside Act 1981	-	Legislation which protects animals, plants and certain habitats in the UK.
Works Plans	-	The plans showing the numbered Works referred to in the Order and submitted with the Application.
World Health Organisation	WHO	A United Nations agency concerned with public health.
Zone of Influence	ZOI	The primary impact area surrounding the development Site defined as the area within commuting distance of the proposed development.
Zone of Theoretical Visibility	ZTV	A computer generated plan showing a maximum area of the surroundings within which a project could theoretically be viewed.

Chapter 1 ◆ Introduction

BACKGROUND

- 1.1 Intermodal Logistics Park North Ltd. ('the Applicant') is promoting proposals for a new strategic rail freight interchange (SRFI) and associated development on land to the east of Newton-le-Willows, in the jurisdictions of St Helens and Wigan Councils. A SRFI is a large multi-purpose freight interchange and distribution centre linked into both the rail and trunk road systems. SRFIs reduce the cost of moving freight by rail and encourage the transfer of freight from road to rail.
- 1.2 Under the Planning Act 2008, the proposals qualify as a Nationally Significant Infrastructure Project (NSIP). Accordingly, an application for a Development Consent Order (DCO) is to be made to the Planning Inspectorate (PINS), which will examine the DCO application on behalf of the Secretary of State (SoS) for Transport.
- 1.3 Before making a DCO application, an Environmental Impact Assessment (EIA) of the Proposed Development will be undertaken in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 ('the EIA Regulations'). EIA is a process that provides the decision maker with sufficient information about the likely environmental effects of a project and is used to improve the environmental design of a development proposal.
- 1.4 The findings of an EIA are presented in a written report known as an Environmental Statement (ES). An ES provides environmental information about the scheme, including a description of the development, its predicted environmental effects and the measures proposed to ameliorate any adverse effects. The Applicant will submit an ES as part of its DCO application.
- 1.5 To ensure that the EIA takes into account relevant considerations and, equally, avoids matters considered irrelevant to the determination of the DCO application, the Applicant wishes at the outset to establish the scope of the EIA. Regulation 10 of the EIA Regulations enables a person who proposes to make a DCO application, to ask the SoS to confirm in writing their opinion as to the scope, and level of detail, of the information to be provided in the ES.
- 1.6 This report is the Applicant's request for a formal scoping opinion under Regulation 10 of the EIA Regulations.

PROJECT OVERVIEW

- 1.7 The Proposed Development is described in detail in section three of this Scoping Report and is known as Intermodal Logistics Park North Rail Freight Interchange (ILPN RFI or ‘the Proposed Development’).
- 1.8 The generic purpose of the Proposed Development is explained in paragraph 2.15 of the Department for Transport’s *National Policy Statement for National Networks* (March 2024, page 15):

For many freight movements, rail is unable to undertake a full end-to-end journey for the goods concerned. The aim of a strategic rail freight interchange (SRFI) is to optimise the use of rail in the freight journey by maximising the long-haul primary trunk journey by rail and minimising some elements of the secondary distribution (final delivery) leg by road, through co-location of other distribution and freight activities. SRFIs need to be supported at both ends by connections to rail infrastructure and logistics terminals. SRFIs are also typically associated with intermodal traffic. A fully effective network of SRFIs, supported by smaller-scale rail freight interchanges, will help to enable the sector to reach its full potential.

- 1.9 The essential components of an SRFI development include direct connections to the rail network which connect to ports at which freight is imported and exported, and high quality strategic road connections to the region or regions that the interchange will serve. An SRFI also requires a substantial area of broadly level and free-draining land for storage and logistics buildings and associated haulage yards.

LOCATION

- 1.10 The DCO Site, as shown on Figure 1.1 is located on the eastern extent of Newton-le-Willows in a flat, agricultural landscape. The DCO Site is located within the local authority areas of St Helens Borough Council, within the Liverpool City Region Combined Authority, and Wigan Council, within the Greater Manchester Region Combined Authority. The DCO Site also lies adjacent to the local authority area of Warrington Borough Council.
- 1.11 Section 2 of this Scoping Report sets out the location and environmental context of the DCO Site in more detail.

THE APPLICANT

- 1.12 Tritax Big Box Development is the development arm of Tritax Big Box REIT plc which owns, manages and develops supply chain infrastructure that is critical to the UK economy. The company has the UK’s largest logistics investment and development portfolio, providing businesses with the space to succeed.
- 1.13 Intermodal Logistics Park North (“ILP North”) was purchased by TBBD in October 2023. The site is now part of the wider TBBD land portfolio and will be promoted for development through the DCO process.
- 1.14 Using its sector specialism market insights, proactively manages high-quality logistics assets,

typically let on long-term leases, majoring on locations that have good access to power, connectivity and people.

PURPOSE AND STRUCTURE OF THIS REPORT

1.15 This EIA Scoping Report constitutes a request under Regulation 10 of the EIA Regulations that the SoS adopts a Scoping Opinion. In accordance with the information set out in the EIA Regulations and within the relevant PINS Advice¹, this EIA Scoping Report is structured as follows:

- section 2 describes the DCO Site, the surrounding context, and identifies sensitive receptors;
- section 3 provides information about the development proposed;
- section 4 outlines the approach that will be undertaken in preparing the EIA and the proposed structure of the ES;
- section 5 identifies the overview of the proposed scope of the EIA and those areas where effects are considered likely to be insignificant and therefore ‘scoped out’ of the EIA;
- sections 6-19 provide a review of the relevant baseline, outline the potential environmental effects and the proposed scope of the assessment under individual topic headings;
- section 20 sets out the proposed approach to the consideration of cumulative and inter-related effects in the ES; and
- section 21 provides concluding thoughts on the EIA scoping process.

1.16 On receipt of this Scoping Report, the SoS will consult with statutory bodies before adopting their formal EIA Scoping Opinion. The Scoping Opinion will confirm the key environmental considerations to be assessed in the ES.

CONSULTATION TO DATE

1.17 The Applicant has begun engaging with relevant local planning authorities and local parish councils about the proposals for ILP North.

1.18 Meetings have taken place with senior officers and elected members at St Helens Council, Wigan Council within whose administrative areas the DCO Site is situated and with Warrington Council as an authority with land adjacent to the DCO Site to introduce the Proposed Development. Local ward members, parish councils and Members of Parliament have been notified of the proposed DCO application and offered briefings with the project

¹ <https://www.gov.uk/government/collections/national-infrastructure-planning-advice-notes>

team.

- 1.19 Pre-application scoping consultation has also taken place with relevant statutory bodies including Natural England, the Environment Agency, Historic England and National Highways.
- 1.20 It is intended that this dialogue will continue throughout the pre-application process in addition to the Applicant's proposed informal and statutory consultation stages of the DCO process.

CONTACTS

- 1.21 Information about the Proposed Development can also be viewed on the project website at <https://www.tritaxbigbox.co.uk/our-spaces/ilp-north/> .

Chapter 2 ◆ The site

INTRODUCTION

2.1 This section provides an overview of the existing environmental features, constraints and opportunities within the DCO Site as well as the wider setting. Further detail of the baseline conditions is provided within each EIA topic in sections 6 to 19.

THE APPLICATION SITE BOUNDARY

2.2 The DCO Site is split broadly in two sections:

- the Main Site – land to the east of the M6 motorway, to the south of the Chat Moss Line and to the west of Winwick Lane incorporating the triangular parcel of land located to the west of Parkside Road and to the north of the Chat Moss Line;
- the Western Rail Chord – land to the west of the M6 motorway, which bisects the DCO Site in a northwest southeast orientation, and to the east of the West Coast Mainline.

2.3 The majority of the land contained within the Main Site is bound to the north by the Chat Moss Line (Liverpool-Manchester railway line), to the west by the M6 motorway and to the southeast by Winwick Lane (A579). The Main Site south of the Chat Moss Line is approximately 198 hectares in size. The Highfield Moss Site of Special Scientific Interest (SSSI) is also adjacent to the north of the DCO Site, which is described in more detail below. A number of other uses exist at the Main Site currently, including:

- Kenyon Hall Airfield, which is a small airfield used by the Lancashire Aero Club for recreational flying of small propeller planes;
- Warrington Model Flying Club, which is a model club for radio controlled model aircraft; and
- Highfield Farm, is comprised of two agricultural/residential buildings set within a curtilage surrounded by agricultural fields.

2.4 The majority of the Main Site is comprised of agricultural fields used for arable crops, with some small patches of woodland in the east. There are also a number of residential properties, farmsteads and a commercial yard within the main site. Parkside Road (A573) runs through the DCO Site to the south before passing over the M6 where it provides access to Parkside Link Road West.

2.5 The triangular parcel of land located to the north of the Chat Moss Line and to the east of Parkside Road also forms part of the Main Site.

- 2.6 The Western Rail Chord of the DCO Site is approximately 12 hectares in size and is bordered to the west by the West Coast Mainline railway, to the north by the Chat Moss Line and to the east by the Parkside West Development. The Western Rail Chord is comprised of safeguarded land for the rail-turn head to enable trains to be serviced to and from the North and the East.
- 2.7 The Western Rail Chord is comprised of scrub land and areas of woodland which are set within the context of an area of redevelopment with commercial uses proposed, which is known as Parkside West, and is currently being promoted through the Town and Country Planning Act process.

KEY ENVIRONMENTAL CONSTRAINTS

- 2.8 A summary of the key environmental constraints reported in sections 6 to 19 are as follows:

Environmental constraints

- 2.9 The DCO Site is relatively flat in topography, with the Main Site ranging from approximately 31 m Above Ordnance Datum (AOD) to 41 m AOD and the Western Rail Chord land ranging from 29 m AOD to 36 m AOD.
- 2.10 Manchester Mosses Special Area of Conservation (SAC) is also located approximately 5.45 km south-east of the DCO Site, whilst Highfield Moss Site of Special Scientific Interest (SSSI) is adjacent to the eastern boundary.
- 2.11 A number of Sites of Biological Interest (SBI) and Local Wildlife Sites (LWS), of county importance are located both adjacent and within 2 km of the DCO Site. Further detail can be found in Chapter 10.
- 2.12 The DCO Site is in an area of low unexploded ordnance (UXO) risk. The DCO Site is in a Coal Authority reporting area but not a Development High Risk Area. Part of the DCO site is within a minerals safeguarding area for Sand and Gravel. The DCO Site sits within an Oil and Gas licencing area for which a number of Petroleum Exploration and Development Licences have been issued. The licences do not give permission for operations but grant exclusivity to licensees within the defined area.
- 2.13 The EA's Flood Map for Planning (Figure 13.1) shows the entirety of the DCO Site to be in Flood Zone 1 (defined as land having a less than 1 in 1,000 annual probability of fluvial or tidal flooding). The nearest EA Flood Zone extents are located approximately 60m west of the DCO Site, associated with the Newton Brook.
- 2.14 The EA's Risk of Flooding from Surface Water map (Figure 13.2) shows various areas of the site to be at 'low', 'medium' and 'high' risk of surface water flooding. Areas indicated to be at potential risk of surface water flooding generally correlate with the location of existing surface water bodies and existing topographical low points.
- 2.15 The DCO Site is not covered by any statutory or non-statutory landscape designations and there are no statutory landscape designations covering the study area.

Heritage constraints

- 2.16 There are 17 designated heritage assets identified within a 1 km radius of the DCO Site. The 'Huskisson Memorial on south side of Railway' is a Grade II Listed Building located within the northern part of the DCO Site.
- 2.17 The Registered Battlefield of the Battle of Winwick (also known as Battle of Red Bank) 1648 is located directly adjacent to, and partially overlapping with, the western edge of the draft Order Limits.
- 2.18 No Scheduled Monuments are located within the DCO Site. One Scheduled Monument is located within a 1 km radius of the DCO Site: 'Castle Hill Motte and Bailey and Bowl Barrow', which is located to the north-west of the DCO Site.
- 2.19 The site of a medieval park, Newton Park, Newton-in-Makerfield, is partially located within the western part of the DCO Site boundary.

ENVIRONMENTAL IMPACT ASSESSMENT

- 2.20 EIA is a systematic process for ensuring that the likely significant effects of a new development on its surrounding environment are fully identified and taken into account before that development is allowed to proceed. The aim of the EIA process is to provide the relevant decision maker, in this case this includes the Planning Inspectorate who will be examining the DCO application, as well as the SoS, who will determine it, with the information necessary to consider potential environmental impacts, to ascertain whether these are acceptable and to secure measures to mitigate any impacts likely to result in significant effects, or remove them completely, prior to granting relevant consents/permissions.
- 2.21 The purpose of EIA is:
- "to protect the environment by ensuring that a local planning authority when deciding whether to grant planning permission for a project, which is likely to have significant effects on the environment, does so in the full knowledge of the likely significant effects, and takes this into account in the decision making process"*
- 2.22 The Planning Act 2008 (the '2008 Act') introduced a new consenting regime for 'nationally significant infrastructure projects' (NSIPs) in the fields of energy, transport, water, wastewater and waste. The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 ('the EIA Regulations'), as amended, set out the procedural requirements for undertaking the EIA in relation to projects requiring development consent under the 2008 Act.
- 2.23 Under the EIA Regulations, certain developments should be screened to determine whether a statutory EIA should be carried out. Any development covered by the development types listed under Schedule 1 of the EIA Regulations requires mandatory EIA, whilst Schedule 2 developments require the discretion of the SoS or examining authority. For all development that falls under Schedule 2 of the EIA Regulations, the need for an EIA is determined depending on whether the development is likely to have significant effects on the

environment by virtue of factors such as its nature, size or location.

- 2.24 The Proposed Development does not fall within Schedule 1 of the EIA Regulations where an Environmental Statement (ES) is mandatory. However, it would meet the criteria set out under paragraph 10 of Schedule 2 of the EIA Regulations as an 'infrastructure project', specifically under:
- Part (a), 'industrial estate development projects';
 - Part (c), 'the construction of intermodal transshipment facilities and of intermodal terminals';
 - Part (d), 'the construction of railways'; and
 - Part (f), 'the construction of roads'.
- 2.25 As the Proposed Development is likely to give rise to "*significant effects on the environment by virtue of factors such as its nature, size or location*" due to the scale and nature of the Proposed Development, the surroundings and the likely cumulative effects with other development, there is a need to fully assess the environmental impacts of the Proposed Development. Accordingly, the proposals are considered to constitute EIA Development and as such, in line with the EIA Regulations, the DCO application will be accompanied by an Environmental Statement (ES). Consequently, in accordance with Regulation 8(1)(b) of the EIA Regulations, we propose to notify the Planning Inspectorate (PINS), in writing, of our intention to provide an ES in respect of the Proposed Development (a 'Regulation 8 notification').
- 2.26 The purpose of this EIA Scoping Request is to confirm the scope and methodology of the ES with PINS, in consultation with the relevant statutory environmental bodies and local planning authorities.

RELEVANT POLICY AND NEED

Guidance and policy

- 2.27 The relevant policy context for a DCO application is the National Networks National Policy Statement (NPSNN) 2024. The NPSNN sets out the government's policies to deliver NSIPs on the national road and rail networks in England.
- 2.28 An SRFI is defined under the NPSNN (para. 4.89) as being capable of handling four trains per day and, where possible, be capable of increasing the number of trains handled and accommodating 775m trains with appropriately configured on-site infrastructure and layout.
- 2.29 The NPSNN (Section 2) details, that national networks provide the opportunity to facilitate modal shift, prioritising decarbonisation and improving air quality outcomes whilst supporting the continuous improvement of the economic efficiency and reliability of end-to-end freight journeys with greater resilience built into the system. In terms of supporting environmental protection and enhancement, the NPSNN is informed by the overarching objectives set out in the Environment Act 2021 and the Environmental Principles Policy Statement.

- 2.30 The NPSNN (Chapter 3) identifies that SRFIs can facilitate network performance and resilience, meet the changing needs of the logistics industry, support connectivity and generate economic growth/competitiveness. As such, supporting the effective development of SRFIs in the right locations as well as other key enablers, is identified as a critical element of realising the full range of environmental benefits that rail freight can offer. However, the full benefits of SRFI schemes are highlighted as needing to be sensitive to, respond to, and contribute to their environmental context, avoiding harm wherever possible. Where adverse impacts are unavoidable adequately mitigating or as a last resort, compensating as well as delivering environmental enhancements are required.
- 2.31 In terms of the government’s policy for addressing need for SRFIs, the NPSNN (Chapter 3) confirms that there is a compelling need for an expanded network of SRFIs throughout the country as a central part of the overarching strategy to achieve net zero emissions and a low carbon economy. However, given the locational requirements and the need for effective connections for both rail and road, it is acknowledged that the number of locations suitable for SRFIs will be limited.
- 2.32 The NPSNN also sets out the impacts that should be assessed for each environmental aspect as part of the EIA process. Therefore, this policy, alongside topic specific guidance and professional expertise, will be used to inform the scope and detail provided within the ES (and by extension, the Preliminary Environmental Information Report (PEIR) and this Scoping Report).
- 2.33 The National Planning Policy Framework (NPPF) and the Government’s Planning Practice guidance are also important and relevant considerations for NSIPs and these will be used to inform the scope of the ES where relevant.
- 2.34 Finally, local policy requirements, such as those set out within the statutory development plan for St Helens and Wigan borough, are a material consideration during the environmental assessments. This includes the allocation of Parkside East in the St Helens Local Plan as land suitable for development as a SRFI, ILP North includes this allocation within the DCO Site. Due to the proximity of the DCO Site to the jurisdiction of Warrington, where receptors and impact pathways fall within this area, the Warrington local policy requirements may also be a material consideration within the environmental assessments.

Need

- 2.35 Parkside as a location for an SRFI has been identified for a considerable time. It sits in an ideal location on the rail network to serve both the West Coast Mainline for north-south traffic, and the Chat Moss Line for east-west traffic. The Main Site, west of the M6 motorway, formerly comprised the Parkside Colliery, with coal train services and rail infrastructure, some of which can be used to reconnect the DCO Site to the Chat Moss Line.
- 2.36 The North-West is a large market for Intermodal Rail because of its distance from key ports for deep sea international trade; and short sea European trade. For trade via Liverpool, most of the region’s import and export container freight will travel via East Coast or Southern ports.

This is due to the global circle routes used by the largest container ships and shipping lines, usually with just one UK port stop; and closer proximity to the main European ports. .

- 2.37 The distances involved from the North-West's major conurbations to Felixstowe, London Gateway and Southampton are over 220 miles and as such, intermodal rail should be highly competitive. This will become more so as the UK logistics market moves to NetZero. Rail is 76% more efficient². As such the demand and need for increased intermodal capacity in the North-West has been imbedded in policy, not least with St Helens and the Liverpool City Region.
- 2.38 The split of the UK's deep-sea intermodal market currently splits at approximately 30% for the North-West, above the Yorks & Humber (28%), but below the Midlands (35%) There is an emerging growth in short-sea unaccompanied unitised traffic movements, to circumvent delays through roll on roll off ferries, for UK – EU trade. Landed at ports with suitable rail facilities, these can and are being converted to rail movements within the UK, Teesport and Tilbury being two examples. Rail should therefore provide the best import-export route to serve the North West market, providing it has sufficient facilities.
- 2.39 ILPN RFI is well located for logistics operators to serve both the Liverpool City Region and the Greater Manchester conurbation, as well as Warrington and North Cheshire. These are all within the approximately 20 miles radius which terminal operators consider to be optimal. That is because the long-haul can be undertaken by rail and the local delivery by HGV, using local drivers who do not have to be away from home. The emerging use of electric HGV's work particularly well in this environment, as they are never far from base and can do a number of drops on a single charge.
- 2.40 Having warehousing on site means that the cartage costs between the terminal and the warehousing operation is considerably reduced and permits later cut-off times. The combination of warehousing and rail terminal distribution will be able to access the M6 at Junction 22, making for very efficient logistics operations.
- 2.41 The North West's industrial and logistics (I&L) market for premises above 100k sqft is currently supply-constrained when considered against the strong demand. This can be evidenced by:
- The availability rate for premises over 100k sqft consistently being under the 8% equilibrium since 2014, with availability currently sitting at 5.4%³
 - Rents have outpaced inflation for these premises, growing 90% over the last decade (versus 29% inflation)⁴
 - Average net absorption⁵ per annum (a measure of demand) over the last decade has exceeded average net deliveries per annum (a measure of supply), with demand being

² Department for Transport (DfT) 'Future of Freight – A long term plan', June 2022

³ CoStar (2024)

⁴ Ibid

⁵ Move ins minus move outs

36% higher than supply⁶

2.42 Furthermore, the key local authorities with access to the strategically significant M6 corridor (St Helens, Wigan and Warrington) are even more supply-constrained when it comes to I&L premises above 100k sqft:

- Availability currently sits at just 3.2%, and availability has consistently been below the 8% equilibrium since 2018⁷
- Rental growth has been even stronger than the regional average at 94%, which is more than 3 times that of inflation (29%) over the last decade⁸
- In line with the North West, demand has exceeded supply over the last decade, and there is only 1.2 years of currently available supply⁹ of premises over 100k sqft

2.43 These figures indicate a clear need for new I&L floorspace to meet the needs of strategic logistics operators along the M6 corridor and in the North West more generally.

⁶ CoStar (2024)

⁷ CoStar (2024)

⁸ Ibid

⁹ Currently existing available premises divided by average net absorption per annum over the period 2014-23

Chapter 3 ◆ The Proposed Development

PROPOSED DEVELOPMENT OVERVIEW

- 3.1 The location and the site of the Proposed Development are described in chapter two of this EIA Scoping Report. This section describes the proposed main physical features of ILPN RFI and their general mode of operation. The draft Order Limits for the Proposed Development are shown on Figure 1.1. References to ‘the DCO Site’ or the ‘Proposed Development’ in this report refer to the land contained within these draft Order Limits. The draft Order Limits are based on best available current understanding of the Proposed Development and its land requirements, however, there is potential for the draft Order Limits to evolve as the project progresses, for example to include offsite highway mitigation, should assessment identify the need.
- 3.2 The Proposed Development is a Strategic Rail Freight Interchange (SRFI) and associated development comprising:
- provision of a rail terminal serving up to 16 trains per day, including ancillary development such as container storage, cranes for the loading and unloading of shipping containers, Heavy Goods Vehicle (HGV) parking, rail control building and staff facilities;
 - a rail turn-back facility within the Western Rail Chord;
 - up to 687,500 square metres (m²) (gross internal area) of warehousing and ancillary buildings with a total footprint of 555,000m² and up to 137,500m² of mezzanine floorspace, subject to ongoing design and market assessment, comprising a mixture of units with the potential to be rail-connected, rail served and additional units;
 - potential for new road/pedestrian bridges across the Chat Moss Line;
 - new road infrastructure and works to existing road infrastructure;
 - provision of an overnight lorry park for users of the SRFI;
 - new energy centre and electricity substations, including central battery storage and potential provision of central Combined Heat and Power (CHP) units to augment the grid supply in the case of demand exceeding instantaneous firm and variable supplies;
 - provision of photovoltaics¹⁰ and battery storage on site;

¹⁰ Likely to be less than 50MW gross peak generating capacity

- strategic landscaping and open space, including alterations to public rights of way and the creation of new ecological enhancement areas;
- demolition of existing on-site structures (including existing residential dwellings / farmsteads and commercial premises);
- potential relocation of the Huskisson Memorial; and
- earthworks to regrade the DCO Site to provide appropriate access, connections to the railway, development plots and landscape zones.

Rail Terminal

- 3.3 The Rail Terminal will be located on the DCO Site to the south of the Chat Moss Line and to the east of the West Coast Mainline.
- 3.4 The connection to the reception sidings and Rail Terminal will be from the Chat Moss Line, providing access to the west (Liverpool) and the east (Trans Pennine to East Coast). With connections off the Chat Moss Line connecting to the West Coast Mainline, for the north (Scotland) and the south (the Midland terminals, Felixstowe, London Gateway and Southampton ports).
- 3.5 Trains to and from Scotland and via eastern routes will utilise the reception sidings located to the east of the West Coast Mainline, on the Main Site. Land is allocated within the adopted St Helens Local Plan for this within the current Parkside West allocation, the area of land identified in the draft Order Limits has refined the area identified in the safeguarded land, and therefore differs from the original allocation, this area is termed the Western Rail Chord for the ILPN RFI.
- 3.6 The reception and terminal sidings will be long enough to allow container freight trains up to 775 metres in length to be brought to the DCO Site for loading and unloading, utilising gantry cranes and reach stackers within the terminal. The Rail Terminal will accommodate up to 16 trains per day (32 rail movements).
- 3.7 Alongside the terminal sidings will be a hard-surfaced area to provide for movements of the vehicles used to load and unload laden and empty containers, vehicles and trailers for movement around the DCO Site and on and off the terminal as well as for container storage.
- 3.8 The Rail Terminal will be an open access facility, available to all logistics businesses to deliver and collect freight. The Chat Moss Line and West Coast Mainline are already electrified and the ILPN RFI design will accommodate electric hauled intermodal trains from the outset

Access

- 3.9 Access to the DCO Site will be from M6 Junction 22 and the Parkside Link Road, which is currently under construction and will be open in advance of any built development becoming operational on the Parkside sites (opening currently anticipated to be 2025). The Proposed Development will connect directly to the link road. For construction purposes, further temporary accesses may be required.

- 3.10 There is potential that off-site highway works will be required, this will be determined through assessment, review and agreement with Local Highway Authorities and National Highways as the project progresses. In any event a new bridge taking Parkside Road over the railway lines serving the Rail Terminal will need to be provided.
- 3.11 A network of internal estate roads is proposed to provide access to the Rail Terminal and warehousing. Roads and junctions will be designed to promote the safe and efficient movement of goods vehicles and car traffic. Parallel footways and cycleways will be provided.
- 3.12 A new access will be provided to Newton Park Farm realigned via the Parkside West development.
- 3.13 Parking provision on site will serve occupiers in terms of both freight and staff needs and will be determined in relation to the relevant parking standards of the highway authorities and in conjunction with consideration of sustainable transport measures identified as part of the DCO application, these will be agreed in conjunction with the highway authorities. In addition, ILPN RFI will provide appropriate overnight parking and associated facilities for HGV drivers associated with the use of the Rail Terminal only.
- 3.14 Parking areas will be future proofed for EV requirements in line with policy requirements, in addition provision for infrastructure for future eHGV charging will be considered.
- 3.15 Pedestrian and cycle access across, and into the DCO Site will be maintained. A detailed review of pedestrian facilities will be incorporated in the supporting Transport Assessment (TA). The TA will also provide a detailed review of local cycling facilities, addressing routes within the vicinity of the DCO Site, including local and national cycle routes, dedicated cycle path links and any other cycle specific infrastructure. Provision of cycle facilities for occupiers will be in accordance with the relevant policy requirements.

Warehouses

- 3.16 The DCO Site would accommodate buildings up to 35m in height. This is likely to only be part of a building based on occupier requirements. Recent enquiries from the market have presented requirements for part 35m high buildings to facilitate operations including specialist packing and distribution occupiers. Therefore to meet with market demand, a maximum height of 35 metres has been set as a maximum parameter for the purposes of EIA scoping. Heights of buildings will vary across the DCO Site and will be zoned based on the constraints of the DCO Site and surrounding receptors, taller buildings will be zoned in areas where there is less sensitivity and lower buildings in zones, where there is greater sensitivity, this will be defined through the pre-application assessment work and set out within the parameters plan that will be submitted as part of the DCO application.
- 3.17 These warehouse buildings would be the location where the containerised loads arriving by train will be broken down and prepared for dispatch to their ultimate destinations by road. These buildings will incorporate freight loading bays in the external walls and will have associated areas for lorry manoeuvring and parking and staff car parks. The whole DCO Site

will be rail served and in addition, some buildings will have the potential to be rail connected. Around each building will be boundary land for elements including landscape works and surface water drainage features.

Landscape and habitats

- 3.18 The DCO Site will developed with a landscape strategy that will incorporate elements including tree and shrub planting and surface water features. These will be designed with a view to providing biodiverse wildlife habitats. Appropriate landscape offsets will be provided around the Highfield Moss SSSI boundary and other identified sensitive receptors following further assessment work.
- 3.19 ILPN RFI will provide at least 10% biodiversity net gain as part of the Proposed Development, this may be via a mixture of on- and off-site habitat creation areas.

Utilities

- 3.20 The Proposed Development will include appropriate provision for water, electricity, telecommunications and gas supply and for the disposal of foul and surface water. Where required, existing utilities will be managed and diverted in consultation with the relevant providers.
- 3.21 Photovoltaics will generate energy for the Proposed Development and the warehouse building roofs will be designed to allow for the potential to install photovoltaics on up to 100% of useable roofspace.
- 3.22 An energy centre incorporating an electricity substation connected to the local electricity distribution network and potential battery storage will be provided.

Construction

- 3.23 The proposed draft Order Limits, as indicated on Figure 1.1, include land likely to be required to enable construction of the Proposed Development. There is the potential that areas of offsite land will be required for highway mitigation works. This will be confirmed following transport modelling. At this stage it is assumed that all temporary construction and laydown areas required for the DCO Site will be contained within the draft Order Limits.
- 3.24 Some demolition will be required to facilitate the Proposed Development, this consists of three residential dwellings, commercial premises and farmsteads, these will be undertaken in accordance with an approved demolition plan.
- 3.25 It is anticipated that the construction access to the DCO Site would be initially via the new Parkside Link Road.
- 3.26 The Proposed Development would be constructed in a series of planned phases. Early phases of warehousing are proposed to be delivered prior to the rail terminal becoming operational. This approach is supported by the NPSNN at paragraph 4.88 where support is given to delivery of warehousing ahead of the final delivery and commissioning of connections to the rail network. This approach protects the Applicant from unforeseen delays with Network Rail

connections and works positively for the longer construction period often required for a rail terminal in comparison to logistics buildings.

- 3.27 The assessment of effects prior to the adoption of additional mitigation measures will assume that construction will proceed in accordance with industry standard best practice techniques and that all legislative requirements will be met. Standard measures will be secured through requirements in the DCO, these will include site waste management, construction environmental management and construction traffic management.

Chapter 4 ◆ Approach to the Assessment

THE PROPOSED EIA

- 4.1 EIA is a process through which the likely significant environmental effects of a development proposal can be identified and, where possible, adverse effects avoided or mitigated. This process is reported in an ES which will be prepared and submitted with the DCO application.
- 4.2 This section of the Scoping Report sets an overarching assessment methodology and identifies the proposed structure for each Chapter of the ES.
- 4.3 The ES will consider various environmental parameters as required by Schedule 4 of the EIA Regulations and environmental effects of the Proposed Development will be considered during both the construction and operational phases.
- 4.4 Table 4.1 identifies the core team that the Applicant has appointed to progress the ILPN RFI project in relation to the EIA. These consultants and the individuals assigned to the project constitute ‘competent experts’ for the purposes of Regulation 14(4)(a) of the EIA Regulations. Further detail of the competency of the technical team are provided in the technical sections of this Scoping Report (sections 6-19).

Table 4.1 The core consultant team appointed by the Applicant to progress the EIA for ILPN RFI

Specialism	Consultant
Legal	Eversheds Sutherland
Planning	CBRE
EIA management and coordination	Savills

ASSESSMENT METHODOLOGY

Guidance

- 4.5 The EIA process will be undertaken with regard to the requirements of the EIA Regulations and good practice guidance. The overarching EIA methodology is set out below. Further

details of the topic-specific methodologies based on professional practice guidance are provided in the technical sections in this Scoping Report.

4.6 The impact assessment methodology will draw on legislation, policy and guidance, including where relevant:

- Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 ('the EIA Regulations');
- Planning Inspectorate (PINS) Advice Notes - Advice Note Seven: Environmental Impact Assessment: process, preliminary environmental information and environmental statements (2020); Advice Note Nine: Rochdale Envelope (2018); and Advice Note on Cumulative Effects Assessment (2024);
- Highways England *et al* (2020) Design Manual for Roads and Bridges, LA 104 Environmental assessment and monitoring, revision 1;
- Institute of Environmental Management and Assessment (IEMA) (2004) Guidelines for Environmental Impact Assessment;
- IEMA (2015) Environmental Impact Assessment Guide to Shaping Quality Development;
- IEMA (2016) Guide to Delivering Quality Development;
- National Networks National Policy Statement (NPSNN) (2024);
- National Planning Policy Framework (NPPF) (2023); and
- Statutory development plan policy requirements.

Assessment structure

4.7 The assessment for each environmental impact pathway will for a separate topic ES Chapter. For each topic ES Chapter, the following components will be set out:

- identification of the study area for the specific topic assessments;
- description of the legislation, policy and guidance for that topic assessment;
- summary of consultation activity undertaken, including comments received in the Scoping Opinion and through the later consultation stages of the DCO process;
- description of the approach to assessment, including details of the methodologies used;
- description of the baseline environmental conditions; and
- presentation of the impact assessment undertaken, which includes:
 - identification of the maximum design scenario for each impact assessment;

- a description of the measures adopted as part of the design of the Proposed Development, including mitigation and design measures which seek to prevent, reduce or compensate for environmental effects or enhance beneficial effects;
 - an assessment of the likely impacts and effects associated with the Proposed Development;
 - identification of any further mitigation measures required in respect of likely significant effects (in addition to those measures adopted as part of the ILPN RFI design); and
 - identification of residual effects and any future monitoring required.
- 4.8 Cumulative (i.e. those effects arising with other developments) and intra-project (inter relationships) effects will be dealt with in a separate ES chapter.

Study area and temporal scope

- 4.9 The study area and temporal scope will differ for each technical discipline. Each ES Chapter will define its own assessment study area geographically and provide a temporal scope indicating clearly the timescales over which the environmental effects will be considered. The temporal scope will generally consider the construction and operational phases.
- 4.10 The EIA does not propose to assess decommissioning as ILPN RFI is intended to be a permanent development and consideration for decommissioning at this stage would be too hypothetical to be meaningful. As such, no powers in relation to decommissioning are to be sought through the DCO.

Environmental baseline conditions

- 4.11 The existing and likely future environmental conditions in the absence of the Proposed Development are known as the ‘baseline conditions’ and ‘future baseline conditions’.
- 4.12 The topic based chapters of the ES will identify the current baseline scenario against which the environmental effects of the Proposed Development can be measured. This will involve describing the current state and circumstances of the identified receptors and changes that might be expected to occur as a result of the Proposed Development. This information will be drawn from surveys and desk based assessments.
- 4.13 A summary of the existing knowledge of the baseline is provided in each topic section of this EIA Scoping Report. The need for, and proposed scope of any further baseline surveys or desk based research is identified in the relevant topic sections.
- 4.14 Consideration will also be given to the conditions that are likely to exist in the absence of the Proposed Development at the time that it is likely to be implemented, including planned or consented developments in the area (the future baseline). Consideration will be given to any likely changes between the time of surveys or desk based research and the future baseline at

the time of construction and operation of the Proposed Development.

- 4.15 The characterisation of future baseline conditions in the ES will take into account the likely effects of climate change, as far as these are known at the time of undertaking the EIA. This will be based on information available from the Met Office Hadley Centre’s UK Climate Projections project (UKCP18), which provides information on plausible changes in climate for the UK and on published documents such as the UK Climate Change Risk Assessment published by the Climate Change Committee.
- 4.16 Where a development is projected to be constructed or operated after construction or operation of the Proposed Development (as relevant), such development will be considered within the assessment of cumulative effects, as discussed in section 20.

Determining significance of effects

- 4.17 A standard approach based on the guidance cited above will be used for describing impacts and forming a judgement as to the significance of the identified effects. However, this approach may be modified or different definitions of terms used for a particular topic, where required or specified by professional guidance for that discipline. This will be clearly explained within the topic chapter of the ES.
- 4.18 Each ES chapter will identify those receptors relevant to the topic and they will be assessed to determine their sensitivity. The receptors will be attributed a sensitivity level ranging from high to low as set out in the table below.

Table 4.2 Sensitivity of a generic environmental receptor to change

Sensitivity	Receptor type
High	Receptors of high importance with a high susceptibility to change and limited potential for substitution or replacement, determined through individual topic assessment.
Medium	Receptors with some sensitivity to change and medium importance. These often have relevance at a regional scale with some opportunity for substitution or replacement.
Low	Receptors with low importance and sensitivity to change, often of relevance at a local level
Negligible	The receptor has very low importance / is not sensitive to change

- 4.19 The magnitude of impact affecting each receptor will then be considered in accordance with the following table. This can be positive or negative as well as temporary or permanent. The

nature of each will be analysed based on quantitative and qualitative techniques and a magnitude assigned ranging from no / negligible change to major change, as set out below.

Table 4.3 Criteria for the magnitude of environmental impact

Magnitude	Criteria
Negligible	Very minor changes that are not noteworthy or material
Minor	Some measurable changes that are noteworthy and material. Minor benefit or minor loss / detrimental change to the receptor’s characteristics, features or elements.
Moderate	Adverse loss of resource or damage to characteristics, features or elements but limited impact on integrity; or, Benefit or addition to characteristics, features and elements of receptor.
Major	Effects will be of a consistently high magnitude and frequency and cause severe damage to key characteristics, features and elements or even total loss; or Major improvement to characteristics, features and elements of receptor.

4.20 Having identified the sensitivity of the receptor and the magnitude of the impact, the standard matrix set out in the table below will be used to indicate the predicted level of effect, ranging from neutral to substantial. For the purposes of the ES, unless specifically defined otherwise in the ES Chapter, effects of moderate and higher are considered to be likely significant effects.

Table 4.4 Framework for identifying significance of environmental effects

	Magnitude of impact			
Receptor sensitivity	Negligible	Minor	Moderate	Major
Negligible	Neutral	Neutral	Minor / Neutral	Minor
Low	Neutral	Minor	Moderate	Moderate / Major
Medium	Neutral	Moderate	Moderate / Major	Major
High	Neutral	Moderate / Major	Major	Substantial

4.21 Where a range is presented within the matrix, professional judgement will be used to define the significance of effect.

4.22 The likely effects of the Proposed Development will be described as:

- adverse / beneficial;
- direct / indirect;
- temporary / permanent; and
- reversible / irreversible.

Assessment of environmental effects

4.23 The topic based chapters will identify potential receptors that might be affected by the Proposed Development. The assessments will then inform the predicted effects that are likely to arise as a result of the Proposed Development in the absence of mitigation.

4.24 Following the assessment of effects, the ES will identify measures to mitigate any significant adverse effects of the Proposed Development where feasible and necessary. Where mitigation is not possible or can only minimise an identified adverse impact, the residual effects will be evaluated and an assessment of their significance reported based on the magnitude of impact against the sensitivity of the receptor.

4.25 An iterative approach will be taken to mitigation and enhancement in the EIA process. This involves a feedback loop during the design and impact assessment process. A specific impact

and the significance of the resulting effect will be initially assessed (taking account of embedded mitigation) and, if this is predicted to be a significant adverse effect, changes will be made (where practicable) to relevant parameters or the design of the Proposed Development in order to avoid, reduce or compensate the impact. The assessment will then be repeated and the process continues until the EIA practitioner is satisfied that:

- the effect has been reduced to a level that is not likely to be significant; or
- having regard to the other constraints, no further changes can reasonably be made to the design or operational parameters in order to reduce the magnitude of impact (and hence significance of effect). In such cases, an overall effect that is still significant would be reported as the residual effect in the ES.

4.26 Where there are beneficial effects, these will also be iterated with a view to enhancement where possible. The same will be applied to adverse effects where practicable.

4.27 A register of enhancement, mitigation and monitoring commitments will be provided in the ES.

Assumptions and limitations

4.28 Each ES Chapter will identify any limitations that have been noted in the baseline data and whether there were any difficulties encountered in compiling the information required to predict environmental effects. Uncertainty in assessments will be discussed, and a conservative (reasonable maximum case) approach will be taken to reporting effects where there is uncertainty. The approach to defining design parameters for the Proposed Development is discussed further below.

HABITAT REGULATIONS ASSESSMENT SCREENING

4.29 It is necessary to consider at this stage the potential effects of the Proposed Development itself, and in combination with other plans and projects on protected habitats.

4.30 Two internationally designated sites considered to be of international ecological importance are present within 10km of the site. Manchester Mosses SAC is situated 5.40km south-east of the DCO Site, and Rixton Clay Pits SAC is situated 7.58km south-east of the DCO Site. Given the proximity of the DCO Site to both of these SACs, a Stage 1 Habitat Regulations Assessment (HRA) screening report will be completed as part of the HRA process to confirm potential impact pathways on the SACs. At this stage, given the distance of the DCO Site from the nearest European site and the nature of the Proposed Development, it is not anticipated that it will have a likely significant effect, in isolation or in combination. If impacts cannot be ruled out, a Stage 2 Appropriate Assessment will be undertaken as part of the overall Habitat Regulations Assessment.

DESIGN PARAMETERS AND THE ROCHDALE ENVELOPE

4.31 The EIA for the Proposed Development will be undertaken in accordance with what are known

as ‘Rochdale Envelope’ principles in reflection of the fact that the DCO will need to retain flexibility around the internal layout and design of ILPN RFI. This flexibility is essential to ensure that the Proposed Development can respond to occupier demand and the evolving requirements of the freight logistics industry. PINS Advice Note Nine: *Using the Rochdale Envelope* (2018) sets out the guiding principles that the EIA will follow.

- 4.32 This approach helps to manage uncertainty in the EIA process and ensures that likely significant effects are assessed on a reasonable ‘maximum case’.
- 4.33 For each of the topic ES Chapters, the maximum design scenario for each impact pathway will be identified from the range of potential options for each parameter to be set out in the ES Project Description Chapter. The maximum design scenario assessed is therefore the scenario which would give rise to the greatest potential impact for that specific pathway. This may vary from topic to topic: for example, a minimum-length construction programme and minimum daily working hours might be the maximum impact scenario for traffic impacts (concentrating the HGV numbers required into the highest number per day or hour) whereas a maximum-length construction programme might be the maximum impact scenario for noise effects due to the greater duration of impacts.
- 4.34 Whilst development parameters are yet to be defined, detail of the Proposed Development for the purposes of scoping is provided in chapter 3 of this Scoping Report. All details (and any remaining optionality) are to be confirmed for the ES phase as the design and layout is subject to change during the course of the EIA, as assessments and consultation will also feedback into design.

REASONABLE ALTERNATIVES

- 4.35 The EIA Regulations require the applicant to provide *‘a description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.’*
- 4.36 The consideration of alternatives will be set out in a specific ES Chapter, drawing from the iterative design, assessment and mitigation process as described above. A key aspect of this is anticipated to be the consideration of the site layout, optimising the design based on the DCO Site’s environmental constraints, topography and sensitivities in the area around the DCO Site.

CUMULATIVE AND INTER-RELATED EFFECTS

- 4.37 The requirement for cumulative effects assessment is set out in the EIA Regulations. Schedule 4(5) requires *‘A description of the likely significant effects of the development on the environment resulting from, inter alia:...(e) the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected by the use of natural resources.’*

- 4.38 A cumulative effects assessment (CEA) will be undertaken for each topic area in the ES and these will be brought together in a CEA ES Chapter. The assessment will consider the effects of the Proposed Development in combination with other developments, and the effects of the Proposed Development on any new sensitive receptors (likely to experience greater effects than existing receptors) introduced by other developments.
- 4.39 It is good practice to consider the inter-relationships between the impact pathways and phases of development that could lead to greater environmental effects. For example, the separate impacts of noise disturbance and habitat loss may have a combined effect on a sensitive ecological receptor.
- 4.40 The potential inter-related effects will be identified and reported within the ES by reviewing the conclusions of the technical topics and their effects on common sensitive receptors. This will be presented in the CEA ES Chapter.
- 4.41 Further detail on the approach to be taken for the CEA and inter-related effects and work undertaken to date for these assessment areas is set out in section 20 of this Scoping Report.

TRANSBOUNDARY EFFECTS

- 4.42 Regulation 32 of the EIA Regulations sets out the procedural duties required where the SoS deems that a project being considered under the EIA Regulations is likely to have significant effects on the environment in a European Economic Area (EEA) State; or where an EEA State deems that its environment is likely to be significantly affected by a project being considered under the EIA Regulations.
- 4.43 The approach taken to the consideration of transboundary effects is set out in section 21 of this Scoping Report.

ENVIRONMENTAL STATEMENT STRUCTURE

- 4.44 The EIA will be compiled into an ES document which will be produced in accordance with the EIA Regulations and will comprise the following volumes.

Table 4.5 Proposed EIA structure

Volume	ES Chapter number	ES Chapter title
Volume 1	n/a	Non-technical Summary
Volume 2	n/a	Glossary, acronyms

Volume	ES Chapter number	ES Chapter title
	1	Introduction
	2	Site Setting
	3	Project Description
	4	Site selection and design evolution
	5	EIA methodology
	6-19	ES Chapters 6 onwards will provide technical assessments. This includes a review of the relevant baseline, outline the potential environmental effects and the scope of the assessment, under topic headings
	20	Cumulative and inter related effects
	21	Summary of mitigation, monitoring and residual effects including the Commitments Register
Volume 3	n/a	Appendices
	n/a	Figures

Chapter 5 ◆ Summary of the Proposed EIA scope

PROPOSED SCOPE OF THE EIA

- 5.1 As part of the EIA scoping process, issues within the topic areas that are identified as unlikely to give rise to significant environmental effects can be omitted (termed ‘scoped out’) from the EIA and, where justified, it is reasonable to propose a reduced scope of topic areas where initial assessment clearly indicates significant effects are unlikely.
- 5.2 Chapters 6-19 of this EIA Scoping Report, set out in detail the current understanding of the Proposed Development, the receiving environment and the likely significant effects. The outcomes of these technical chapters are summarised below in Table 5.1 which identifies, at a summary level, the topic areas proposed to be scoped in or out from the EIA. For the full justification, the reader is directed to the relevant topic chapter where the explanation for the basis of the approach is provided.

Table 5.1 Summary of the proposed EIA scope

Construction Effects	Scoped in or out?	Operation Effects	Scoped in or out?
Chapter 6: Transport			
Construction traffic travelling to and from the DCO Site	Scoped out	Anticipated levels of traffic (LGV and HGV's) to be generated by the DCO Site	Scoped in
Chapter 7: Air Quality			
Dust generated by construction activities	Scoped in	Road vehicle exhaust emissions generated by vehicles travelling to and from the Proposed Development	Scoped in
Road vehicle exhaust emissions generated by vehicles travelling to and from the Proposed Development	Scoped in	Rail emissions as a result of an increase of locomotive movements on the rail network	Scoped in
		Air quality impacts as a result of combustion plant (back up CHP)	Scoped in
Chapter 8: Noise and Vibration			

Construction Effects	Scoped in or out?	Operation Effects	Scoped in or out?
Construction traffic noise	Scoped in	Operational road traffic noise on surrounding highway network	Scoped in subject to the spatial scope identified.
Construction noise	Scoped in	Operational railway noise from additional freight trains	Scoped in subject to the spatial scope identified.
Construction vibration	Scoped in – up to distance of 100 m from nearest construction activity likely to induce vibration	Operational noise from the DCO Site	Scoped in subject to the spatial scope identified.
	Scoped out – beyond distance of 100 m from nearest construction activity likely to induce vibration	Operational railway vibration from additional freight trains	Scoped in subject to the spatial scope identified.
		Operational vibration from vehicles travelling along highway network	Scoped out
		Operational vibration from vehicles travelling along Parkside Link Road or new	Scoped out

Construction Effects	Scoped in or out?	Operation Effects	Scoped in or out?
		access roads	
Chapter 9: Landscape and Visual Impact			
Effects on landscape features/landscape fabric within the DCO Site	Scoped in	Effects on landscape features/landscape fabric within the DCO Site	Scoped in
Statutory Designated Landscapes	Scoped out	Statutory Designated Landscapes	Scoped out
Non-Statutory Designated Landscapes	Scoped out	Non-Statutory Designated Landscapes	Scoped out
Effects on National Character Areas	Scoped out	Effects on National Character Areas	Scoped out
Effects on Local Character Areas	Scoped in	Effects on Local Character Areas	Scoped in
Visual effects	Scoped in	Visual effects	Scoped in
Night Time Effects (Lighting)	Scoped in	Night Time Effects (Lighting)	Scoped in
Chapter 10: Ecology and Biodiversity			

Construction Effects	Scoped in or out?	Operation Effects	Scoped in or out?
Manchester Mosses SAC (5.45km SE) (will be subject to HRA Stage 1 Screening Report)	Scoped out	Manchester Mosses SAC (5.45km SE) (will be subject to HRA Stage 1 Screening Report)	Scoped out
Rixton Clay Pits SAC (7.79km SE) (will be subject to HRA Stage 1 Screening Report)	Scoped out	Rixton Clay Pits SAC (7.79km SE) (will be subject to HRA Stage 1 Screening Report)	Scoped out
Highfield Moss SSSI/SBI (adjacent N)	Scoped in	Highfield Moss SSSI/SBI (adjacent N)	Scoped in
All other non-statutory sites (17 total within 2km of the DCO Site)	Scoped in	All other non-statutory sites (17 total within 2km of DCO Site)	Scoped out
Arable Land	Scoped out	Arable Land	Scoped out
Grassland	Scoped in	Grassland	Scoped in
Hedgerow	Scoped in	Hedgerow	Scoped in
Lines of Trees	Scoped in	Lines of Trees	Scoped in

Construction Effects	Scoped in or out?	Operation Effects	Scoped in or out?
Scattered Trees	Scoped in	Scattered Trees	Scoped in
Broadleaved Woodland	Scoped in	Broadleaved Woodland	Scoped in
Ponds	Scoped in	Ponds	Scoped in
Ditches	Scoped in	Ditches	Scoped in
Degradation of Retained Habitats	Scoped in	Degradation of Retained Habitats	Scoped in
Invasive non-native Flora	Scoped in	Invasive non-native Flora	Scoped in
Amphibians (GCN, smooth newt, palmate newt, common frog, common toad)	Scoped in	Amphibians (GCN, smooth newt, palmate newt, common frog and common toad)	Scoped in
Badger	Scoped in	Badger	Scoped in
Bats	Scoped in	Bats	Scoped in
Birds (breeding)	Scoped in	Birds (breeding)	Scoped in

Construction Effects	Scoped in or out?	Operation Effects	Scoped in or out?
Birds (non-breeding)	Scoped in	Birds (non-breeding)	Scoped in
Hedgehog	Scoped in	Hedgehog	Scoped in
Invertebrates	Scoped in	Invertebrates	Scoped in
Otter	Scoped out	Otter	Scoped out
Reptiles	Scoped out	Reptiles	Scoped out
Water Vole	Scoped out	Water Vole	Scoped out
Chapter 11: Built Heritage			
Designated Heritage Assets within the DCO Site: <ul style="list-style-type: none"> Huskisson Memorial on South Side of Railway 60 Metres from Road (Grade II) Registered Historic Battlefield of Winwick 	Scoped In	Designated Heritage Assets within the DCO Site: <ul style="list-style-type: none"> Huskisson Memorial on South Side of Railway 60 Metres from Road (Grade II) Registered Historic Battlefield of Winnick 	Scoped in

Construction Effects	Scoped in or out?	Operation Effects	Scoped in or out?
Non-Designated Heritage Assets within the DCO Site: <ul style="list-style-type: none"> • Parkside Road Bridge 	Scoped in	Non-Designated Heritage Assets within the DCO Site: <ul style="list-style-type: none"> • Parkside Road Bridge 	Scoped in
Designated Heritage Assets surrounding the DCO Site (1km): <ul style="list-style-type: none"> • Newton Park Farmhouse (Grade II) • Barn to East of Newton Park Farmhouse (Grade II) • Barn to North of Woodhead Farmhouse (Grade II) • Woodhead Farmhouse (Grade II) • St Oswald’s Well in Field to South of Woodhead Farmhouse (Grade II and Scheduled Monument) • Wall, Gates and Gate Piers to Front of Kenyon Hall (Grade II) • Holly House (Grade II) • Barrow Farmhouse (Grade II) • Newton-le-Willows Station (Grade II) • Newton Viaduct to West of Station (Grade II) • High Street and Willow Park Conservation Area (inclusive of heritage assets within its boundary) 	Scoped in	Designated Heritage Assets surrounding the DCO Site (1km): <ul style="list-style-type: none"> • Newton Park Farmhouse (Grade II) and Barn to East of Newton Park Farmhouse (Grade II) • Woodhead Farmhouse (Grade II) and Barn to North of Woodhead Farmhouse (Grade II) • St Oswald’s Well in Field to South of Woodhead Farmhouse (Grade II and Scheduled Monument) • Wall, Gates and Gate Piers to Front of Kenyon Hall (Grade II) • Holly House (Grade II) • Barrow Farmhouse (Grade II) • Newton-le-Willows Station (Grade II) • Newton Viaduct to West of Station (Grade II) • High Street and Willow Park Conservation Area (inclusive of heritage assets within its boundary) 	Scoped in
Non-Designated Heritage Assets surrounding the DCO Site (1km): <ul style="list-style-type: none"> • Highfield Farm Barn 	Scoped in	Non-Designated Heritage Assets surrounding the DCO Site (1km): <ul style="list-style-type: none"> • Highfield Farm Barn 	Scoped in

Construction Effects	Scoped in or out?	Operation Effects	Scoped in or out?
<ul style="list-style-type: none"> • Railway Connecting Manchester to Liverpool Line with the Warrington to Preston Line • Kenylo Bridge, Sandy Brow Lane (LLB) • Oven Back Farm (LLB) • Gerosa Avenue (LLB) • Rose Mount Terrace (LLB) • Monk House (LLB) • The Cottage (LLB) • Pipers Hole Cottage (LLB) 		<ul style="list-style-type: none"> • Railway Connecting Manchester to Liverpool Line (the Chat Moss Line) with the Warrington to Preston Line (West Coast Mainline) • Kenylo Bridge, Sandy Brow Lane (LLB) • Oven Back Farm (LLB) • Gerosa Avenue (LLB) • Rose Mount Terrace (LLB) • Monk House (LLB) • The Cottage (LLB) • Pipers Hole Cottage (LLB) 	
<p>Designated Heritage Assets surrounding the DCO Site (1km), unlikely to be affected:</p> <ul style="list-style-type: none"> • Bowl Barrow West of Highfield Lane (Scheduled Monument) • Castlehill Motte and Bailey and Bowl Barrow (Scheduled Monument) 	<p>Scoped out</p>	<p>Designated Heritage Assets surrounding the DCO Site (1km), unlikely to be affected:</p> <ul style="list-style-type: none"> • Bowl Barrow West of Highfield Lane (Scheduled Monument) • Castlehill Motte and Bailey and Bowl Barrow (Scheduled Monument) 	<p>Scoped out</p>
<p>Non-Designated Heritage Assets surrounding the DCO Site (1km), unlikely to be affected:</p> <ul style="list-style-type: none"> • No. 149 Mill Lane • The Millstone Public House • Nos. 45-51 Golborne Dale Road No. 6 Bull Houses • Nos. 18-14 Bull Houses 	<p>Scoped out</p>	<p>Non-Designated Heritage Assets surrounding the DCO Site (1km), unlikely to be affected:</p> <ul style="list-style-type: none"> • No. 149 Mill Lane • The Millstone Public House • Nos. 45-51 Golborne Dale Road No. 6 Bull Houses • Nos. 18-14 Bull Houses 	<p>Scoped out</p>

Construction Effects	Scoped in or out?	Operation Effects	Scoped in or out?
<ul style="list-style-type: none"> Highfield, Kenyon Lane (LLB) 		<ul style="list-style-type: none"> Highfield, Kenyon Lane (LLB) 	
Chapter 12: Archaeology			
Prehistoric Remains	Scoped in	Prehistoric Remains	Scoped out
Roman Remains	Scoped in	Roman Remains	Scoped out
Medieval Remains	Scoped in	Medieval Remains	Scoped out
Post-medieval Remains	Scoped in	Post-medieval Remains	Scoped out
Chapter 13: Hydrology			
Flood risk Surface water – quantity and quality Foul Water – quantity and quality Potable water supply	All to be scoped in, with the exception of flood risk from coastal, reservoir and canal sources.	Flood risk Surface water – quantity and quality Foul Water – quantity and quality Potable water supply	All to be scoped in, with the exception of flood risk from coastal, reservoir and canal sources.

Construction Effects	Scoped in or out?	Operation Effects	Scoped in or out?
Chapter 14: Geology, Soils and Contaminated Land			
Impacts on receptors from Contamination and Ground Gas arising from the DCO Site and nearby	Scoped in	Loss of minerals resource	Scoped in
Impacts on or loss of Soils and Geology as a resource	Scoped out	Hydrogeological changes impacting upon Highfield Moss SSSI	Scoped in
Impacts on receptors from construction related activities	Scoped out	Mining related impacts	Scoped out
Encountering UXO	Scoped out		
Chapter 15: Materials and Waste			
Waste arisings from demolition	Scoped in	Waste arisings during operation	Scoped in
Waste arisings from enabling works and	Scoped in		

Construction Effects	Scoped in or out?	Operation Effects	Scoped in or out?
construction			
Chapter 16: Energy and Climate Change			
Effect of Proposed Development on climate change (construction stage GHG emissions)	Scoped in	Effect of Proposed Development on climate change (operational stage GHG emissions), focussing on the primary direct and indirect effects of the Proposed Development ¹¹	Scoped in
Climate change resilience	Scoped in	Climate change resilience	Scoped in
Chapter 17: Socio-economics			
Impact on residents who could work on the construction of the Proposed Development	Scoped in	Impact on residents who could benefit from employment opportunities at the Proposed Development once operational	Scoped in
Impact on economic output as a result of temporary construction activity	Scoped in	Impact on local industrial and logistics businesses	Scoped in

¹¹ Excluding an assessment of upstream or downstream effects associated with the manufacture or use of goods that might pass through the SRFI which is more appropriately accounted for elsewhere and would be disproportionate to include within the scope of this assessment, since such effects cannot be understood or quantified at this stage.

Construction Effects	Scoped in or out?	Operation Effects	Scoped in or out?
Temporary disruption caused to local businesses and employment uses	Scoped in	Impact on the skills and training levels of the local labour force	Scoped in
Impact on local social infrastructure as a result of an increase in on-site jobs	Scoped out	Impact on economic output as a result of permanent operations	Scoped in
Impact on demand for housing within the labour market area due to increased operational employment	Scoped in	Impact on Local Authority Revenues	Scoped in
Impact on land use and accessibility (including private property and housing, development land, community land and assets, businesses, agricultural land holdings; walkers, cyclists and horse-riders)	Scoped in	Impact on demand for housing within the labour market area due to increased operational employment	Scoped in
Chapter 18: Population and Human Health			
Physical activity	Scoped in	Physical activity	Scoped in

Construction Effects	Scoped in or out?	Operation Effects	Scoped in or out?
Risk taking behaviour	Scoped in	Risk taking behaviour	Scoped out
Diet and nutrition	Scoped out	Diet and nutrition	Scoped out
Housing	Scoped out	Housing	Scoped out
Relocation	Scoped out	Relocation	Scoped out
Open space, leisure and play	Scoped in	Open space, leisure and play	Scoped in
Transport modes, access and connections	Scoped in	Transport modes, access and connections	Scoped in
Community safety	Scoped out	Community safety	Scoped out
Community identity, culture, resilience and influence	Scoped in	Community identity, culture, resilience and influence	Scoped in
Social participation, interaction and support	Scoped in	Social participation, interaction and support	Scoped out
Education and training	Scoped out	Education and training	Scoped out

Construction Effects	Scoped in or out?	Operation Effects	Scoped in or out?
Employment and income	Scoped in	Employment and income	Scoped in
Climate change mitigation and adaptation	Scoped in	Climate change mitigation and adaptation	Scoped in
Air quality	Scoped in	Air quality	Scoped in
Water quality or availability	Scoped out	Water quality or availability	Scoped out
Land quality	Scoped out	Land quality	Scoped out
Noise and vibration	Scoped in	Noise and vibration	Scoped in
Radiation	Scoped out	Radiation	Scoped out
Health and social care services	Scoped in	Health and social care services	Scoped out
Built environment	Scoped out	Built environment	Scoped out

Construction Effects	Scoped in or out?	Operation Effects	Scoped in or out?
Wider societal infrastructure and resources	Scoped out	Wider societal infrastructure and resources	Scoped out
Chapter 19: Major Accidents and Disasters			
Construction hazards	Scoped in	Flooding and damage due to severe weather events; major transport and industrial accidents; malicious attacks; transportation of hazardous loads; hazardous waste; increased rail freight movements.	Scoped in

Chapter 6 ◆ Transport

INTRODUCTION

- 6.1 This chapter outlines the scope and methodology for the assessment of the likely significant effects arising from the Proposed Development, as described in Chapter 3: The Proposed Development, in respect to transportation.
- 6.2 It sets out the approach to the baseline data gathering and assessment of the Proposed Development's impacts during construction and operation.
- 6.3 The following aspects have been considered as part of the scope and methodology for transportation:
- severance on the local community during the construction phase and with the completed and operational development;
 - delays to drivers using the highway network during the construction phase and with the completed and operational development;
 - walk, wheeled, and cycle delay during the construction phase and with the completed and operational development;
 - walk, wheeled, and cycle amenity during the construction phase and with the completed and operational development;
 - fear and intimidation during the construction phase and with the completed and operational development;
 - accidents and safety during the construction phase and with the completed and operational development; and
 - hazardous loads
- 6.4 In line with the EIA Regulations, this Scoping Report chapter has been compiled by appropriately qualified, experienced, and competent experts. The transport work stream has been led by Director Sam Denby. Sam is a Chartered Transport planner with over twenty years' experience in the industry and leads the Northern Transportation Team. He holds a Master of Science Degree in Transport Engineering and Planning and is an experienced project manager, leading transport planning teams in delivering a range of projects, with a particular specialism in large scale commercial distribution developments.
- 6.5 Supporting Sam is Technical Director Ashley Russell. Using his experience of over 16 years in transport infrastructure scheme development, modelling, assessment, Ashley will focus on

the modelling to understand the Proposed Development’s impact.

RELEVANT LAW, POLICY AND GUIDANCE

Introduction

- 6.6 This section sets out the national, regional and local policy background for the Proposed Development relating to transport.
- 6.7 The DCO will be assessed against the Infrastructure Planning (Decisions) Regulations 2010 and National Networks National Policy Statement (‘NPSNN’, adopted 2024). Notwithstanding this, the National Planning Policy Framework (NPPF, 2023) and statutory development plans are relevant material considerations which are considered further in this section.
- 6.8 Further to the above, while the following sections considers current policy, as a matter of course the team will monitor for any relevant policy changes going forward.

National Policy

National Networks National Policy Statement – March 2024

- 6.9 National Networks National Policy Statement (NPSNN) is the national policy and includes critical guidance for the development of strategic road and rail infrastructure projects in England. It focuses on ensuring that transport networks support economic growth, improve connectivity, and promote sustainability. Key points include:
- **Purpose and Economic Role:** The NPSNN acknowledges the crucial role of national networks in supporting economic growth by improving connectivity and accessibility. These networks enable the movement of people and goods across the country, support tourism, and enhance access to jobs, education, and skills, all of which are critical for regional and national economic development (paragraphs 2.1, 2.3)
 - **Freight and Modal Shift:** The policy highlights the importance of the freight sector, which underpins the economy by ensuring the smooth movement of goods. The government aims to increase the efficiency and environmental sustainability of freight networks, targeting a 75% growth in rail freight by 2050 to reduce the reliance on road transport and lower emissions (paragraph 2.3)
 - **Environmental Commitments:** The revised NPSNN aligns with the UK’s legal obligations under the Climate Change Act 2008 and the Environment Act 2021, incorporating measures to decarbonise transport and improve air quality. It stresses the need for resilience in transport infrastructure to withstand climate change impacts, in line with the Third National Adaptation Programme (paragraphs 2.3, 4.79)
 - **Sustainability and Habitat Protection:** The policy emphasises sustainable development, noting that while no significant adverse effects were identified in the sustainability appraisal, uncertain effects on greenhouse gases and air quality remain. A Habitats Regulations Assessment was conducted to ensure compliance with conservation requirements, and where impacts to habitats could not be avoided, compensatory

measures must be taken (paragraphs 1.20–1.25)

- **Project Specifics and Mitigation:** For infrastructure projects impacting surrounding transport systems, the policy requires applicants to take reasonable steps to mitigate these impacts, ensuring resilience across connected networks (paragraphs 2.5)

6.10 The NPSNN also identifies the economic and environmental benefits of rail freight interchanges. The main objectives of Government policy for Strategic Rail Freight Interchanges (SRFI) is to facilitate development of the intermodal rail freight industry thereby encouraging modal shift from road to rail. This helps to:

- Reduce road congestion;
- Address climate change as part of a low carbon economy;
- Support long-term development of efficient rail freight distribution logistics; and
- Support local growth and create employment.

6.11 The NPSNN aims to meet these objectives by encouraging the development of an expanded network of SRFI.

6.12 In relation to transport, and in the context of the Proposed Development, paragraph 5.2.76 states:

‘For Strategic Rail Freight Interchanges, the applicant’s assessment should include an assessment of the transport impacts on other networks as part of the application, based on discussions with the Local Highway Authority/Local Transport Authority/Local Planning Authority’

6.13 In the context of the supporting documentation paragraph 5.277 of the NPSNN states:

‘If a project is likely to have significant transport impacts it should include a Transport Assessment, using the Transport Analysis Guidance methodology stipulated in Department for Transport guidance, or any successor to such methodology.’

6.14 Furthermore para 5.278 of the NPSNN states:

6.15 *‘The applicant should also prepare a travel plan outlining management measures to mitigate transport impacts. A successful travel plan and mitigation strategy will understand the needs of people walking, wheeling or cycling. Audits should be undertaken to understand their movements and establish any barriers and opportunities to improve this environment. This includes detailing the accessibility of the development by active travel modes, such as the provision of safe and secure cycle parking and associated facilities, creating high quality pedestrian environments including through public realm improvements, enhancing modal interchanges to create an integrated transport system and access via public transport such as bus stops within close proximity of the development. Mitigating measures should also look to reduce the need for any parking associated with the proposal, ensure the infrastructure*

needed to support the transition to alternative fuels including electric vehicles are in place during construction and ahead of operation, and to mitigate transport impacts.'

- 6.16 With respect to any mitigation that may be required para. 5.281 sets out that mitigation measures for schemes should be proportionate and reasonable, focussed on facilitating journeys by active travel, public transport, shared transport and cleaner fuels.
- 6.17 The NPSNN then further goes on to state that where development would worsen accessibility, there is a strong expectation that such impacts should be mitigated. Where impacts cannot be mitigated, the applicant is required to provide reasoning as to why impacts cannot be mitigated.

National Planning Policy Framework (NPPF) December 2023

- 6.18 The NPPF sets out the Government's policies for delivering sustainable development through the planning system. Local authorities are required to take these policies into account when formulating local development plans and when determining planning applications.
- 6.19 The most recent NPPF was published in December 2023 and sets out the Government's planning policies for England and how these are expected to be applied at a local level. The NPPF is a material consideration in plan making and decision taking but the NPSNN sets out the primary policy framework.
- 6.20 Paragraph 108 of the NPPF seeks to encourage opportunities to promote walking, cycling and public transport use. This is supplemented by paragraph 109 which states that development should be focused in sustainable locations and offer a genuine choice of transport modes.
- 6.21 Paragraph 115 states development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.
- 6.22 Development proposals should also give priority to pedestrian and cycle movements and facilitate access to high quality public transport. The needs of people with disabilities and reduced mobility should also be addressed (paragraph 116).

National Highways DfT Circular 01/2022

- 6.23 National Highways DfT Circular 01/2022 provides updated policy guidance on the management and operation of the Strategic Road Network (SRN) in England. The circular, issued by the Department for Transport [DfT], outlines how development proposals that interact with the SRN should be managed, particularly focusing on maintaining network efficiency, safety, and sustainability.
- 6.24 Key Components:

Strategic Road Network and Development:

- Developments affecting the SRN should align with national transport and planning policies.

- Collaboration between developers, local authorities, and National Highways is required to ensure that new developments do not negatively impact the efficiency, capacity, or safety of the SRN.

Transport Assessments and Mitigation:

- Paragraph 51 states that where a transport assessment indicates that a development would have an unacceptable safety impact or the residual cumulative impacts on the SRN would be severe, the developer must identify when, in relation to the occupation of the development, transport improvements become necessary.
- Paragraph 52 then goes on to states that the scope and phasing of necessary transport improvements will normally be defined by the company in planning conditions that seek to manage development in line with the completion of these works. In such circumstances, modifications to the SRN must have regard to the need to future-proof the network, while its delivery may require a funding agreement between the development promoter and the company

Capacity and Safety:

- The circular stresses the importance of maintaining the SRN's operational capacity and safety standards. Proposals should not worsen traffic conditions or lead to safety hazards on key routes.
- National Highways have a duty to work with developers and their consultants to deliver safe solutions that facilitate NSIPs.

Sustainable Transport:

- The circular emphasises sustainable transport modes, encouraging developments that reduce reliance on private car travel and promote alternatives like public transport, cycling, and walking.
- Developers should integrate sustainable travel options into their proposals, particularly in relation to SRN access.

Environmental and Climate Considerations:

- The document highlights the need for developments to consider environmental impacts on air quality, light pollution, noise, and carbon emissions in relation to the SRN.
- Alignment with the UK's net zero carbon goals is required, with developments expected to contribute to lowering emissions from transport.

Planning Applications and Collaboration:

- The circular advises early engagement between developers, local planning authorities, and National Highways to address potential impacts on the SRN.

- Collaborative working is encouraged to ensure that development and transport infrastructure are planned and delivered cohesively.

Junction Design and Access:

- The guidance includes detailed advice on the design and access arrangements for new or modified SRN junctions to ensure they operate safely and efficiently.
- Standards for junction layouts, including safety features, are provided to ensure new developments do not compromise road operations.

Summary:

- 6.25 The DfT Circular 01/2022 sets out comprehensive guidelines for managing the relationship between new developments and the SRN. It emphasises safety, capacity, environmental sustainability, and collaboration, ensuring that development does not adversely impact the SRN. Developers must provide detailed transport assessments and implement mitigation measures where necessary, with a focus on integrating sustainable travel options and supporting the UK's climate change goals.

Design Manual for Roads and Bridges (DMRB)

- 6.26 The DMRB (Design Manual for Roads and Bridges) is a comprehensive set of standards and guidelines used in the planning, design, construction, operation, and maintenance of roads and bridges in the UK. It is primarily used by the UK's National Highways (formerly Highways England) and is essential for engineers, planners, and contractors working on road infrastructure projects.
- 6.27 The DMRB covers a wide range of topics, including:
- geometric design of roads;
 - structures (e.g., bridges, tunnels);
 - road safety and traffic management;
 - environmental considerations (e.g., noise, air quality);
 - drainage and water management;
 - materials and construction methods; and
 - maintenance and operation of road networks.
- 6.28 The guidance ensures that projects meet certain safety, efficiency, and environmental standards. It is continually updated to reflect technological advances, new regulations, and evolving best practices.

Manual for Streets

- 6.29 The Manual for Streets (MfS) is a key guidance document in the UK that focuses on the design of residential and urban streets. It was published by the Department for Transport (DfT) in 2007, with the goal of shifting the focus of street design from being vehicle-centric to creating streets that serve people and communities. The guidance promotes a more holistic approach to urban planning, emphasising walkability, cycling, public transport, and place-making.
- 6.30 Key features of the MfS include:
- **People-first design:** Streets should prioritise pedestrians, cyclists, and public transport users over cars. The manual emphasises the importance of streets as public spaces, not just transport corridors.
 - **Design flexibility:** It encourages flexibility in design, allowing for local conditions and contexts to dictate street layouts rather than rigid, one-size-fits-all solutions.
 - **Integration of land use and transport:** MfS promotes the idea that streets should support broader social, economic, and environmental objectives, such as promoting sustainable development and reducing car dependency.
 - **Reducing traffic speeds:** The manual recommends designing streets in a way that naturally slows down traffic, using features such as narrower roads, tighter corner radii, and changes in surfacing to enhance safety.
 - **Mixed-use environments:** MfS encourages the creation of mixed-use spaces where people can live, work, and play, making streets more vibrant and enhancing community life.
 - **Shared space concepts:** It introduces concepts like shared spaces, where there is less segregation between pedestrians, cyclists, and vehicles, encouraging more cooperative behaviour and making streets safer and more pleasant to use.
- 6.31 A later supplement, Manual for Streets 2 (2010), extended the principles to include busier, non-residential streets that link different parts of the town and city network.
- 6.32 In summary, Manual for Streets is a guide to creating better, more inclusive streets that prioritise people over vehicles, fostering safer and more attractive urban environments.

Regional

Local Transport Plan [LTP] 3 for Merseyside

- 6.33 The LTP3 was adopted in April 2011 and sets out the implementation plans in the short term to 2015 and looks to the longer-term strategy for 2024 on how to improve transport in Merseyside.
- 6.34 The Local Transport Plan (LTP) for Merseyside outlines the region's strategy for transportation

development, aiming to improve connectivity, sustainability, and accessibility. It is designed to support economic growth, reduce carbon emissions, and enhance quality of life for residents.

6.35 Key components of the plan include:

- **Sustainable Transport:** Emphasis on increasing public transport use, cycling, and walking to reduce reliance on private cars and lower carbon emissions.
- **Public Transport Improvements:** Investment in bus and rail networks to improve frequency, reliability, and coverage, including enhancing interconnectivity between different transport modes.
- **Road Network:** Maintenance and upgrading of major roads and highways to ensure smoother traffic flow, alongside initiatives to reduce congestion in key areas.
- **Active Travel:** Development of cycling and walking infrastructure to encourage healthier, more environmentally-friendly travel options.
- **Air Quality and Environment:** A focus on reducing pollution and improving air quality through green transport initiatives, such as promoting electric vehicles, hydrogen refuelling and implementing low-emission zones.
- **Social Inclusion:** Ensuring access to transport for all residents, including those in rural areas and disadvantaged communities, to promote equal access to employment, education, and essential services.
- **Safety:** Enhancing road safety through better design, traffic management, and education campaigns to reduce accidents and fatalities.
- **Partnerships and Collaboration:** Working with local authorities, businesses, and communities to deliver the transport strategy effectively.

6.36 The LTP is designed to meet the future needs of Merseyside while balancing economic, environmental, and social priorities. It aligns with broader regional and national transport goals.

Greater Manchester Transport Strategy 2040

6.37 The Greater Manchester Transport Strategy 2040 outlines a long-term vision for developing an integrated, sustainable, and resilient transport network across the Greater Manchester region. The strategy focuses on transforming the transport infrastructure to meet the needs of a growing population while addressing environmental, economic, and social challenges. In summary its key goals and principles are:

Vision:

- The overarching vision is to create "World-class connections that support long-term, sustainable economic growth and access to opportunity for all."

Key Goals:

- **Sustainability:** The strategy prioritises reducing carbon emissions and improving air quality by promoting cleaner, greener transport options like cycling, walking, and electric vehicles.
- **Integration:** Building an integrated, multi-modal transport system that connects different modes of travel (buses, trains, trams, cycling, and walking) to create seamless journeys across the region.
- **Inclusive Growth:** Ensuring that transport supports economic growth across all communities, creating access to jobs, education, and services. It emphasises transport equality and addressing mobility challenges for all residents.
- **Innovation and Technology:** Using smart technology to improve transport services and operations. This includes smart ticketing, real-time travel information, and the use of data for better planning.
- **Resilience:** Making the transport network more resilient to climate change, economic shifts, and population growth by investing in infrastructure and maintaining long-term flexibility.
- **Health and Wellbeing:** Encouraging active travel modes, like walking and cycling, to improve health outcomes and reduce congestion. The strategy also aims to create more liveable streets, improving safety and comfort for pedestrians and cyclists.

Major Priorities:

- **Zero-Emission Transport:** By 2040, Greater Manchester aims to significantly reduce emissions from the transport sector, with a target for zero-carbon buses, electric vehicle infrastructure, and expansion of the low-emission zones.
- **Public Transport Improvements:** Enhancing bus and tram networks, expanding rail capacity, and introducing rapid transit services, particularly in under-served areas. This also includes the development of a more affordable and user-friendly fare system.
- **Active Travel:** Increasing walking and cycling infrastructure by building new bike lanes, pedestrian-friendly streets, and connecting greenways across Greater Manchester.
- **Road Network Management:** Addressing congestion issues by investing in smart motorways, improved traffic management systems, and creating alternatives to car travel through enhanced public transport options.
- **Freight and Logistics:** Supporting sustainable logistics and freight transport through initiatives like shifting freight to rail and using cleaner technologies for urban deliveries.

Governance and Collaboration:

6.38 The strategy encourages collaboration between local authorities, businesses, and residents to co-create a transport system that reflects local needs. It involves the Greater Manchester Combined Authority (GMCA) and Transport for Greater Manchester (TfGM) as the relevant authorities to engage with .

Timeline:

- Near-Term (up to 2025): Focus on improving current public transport systems, active travel infrastructure, and promoting cleaner vehicles.
- Mid-Term (2025-2030): Expansion of public transport capacity, smart technology integration, and deeper cuts in emissions.
- Long-Term (2030-2040): Achieving a zero-carbon transport system, fully integrated transport modes, and sustainable economic growth linked to the transport network.

6.39 In essence, the Greater Manchester Transport Strategy 2040 aims to create a connected, clean, accessible, and efficient transport network that promotes economic vitality, reduces environmental impact, and improves quality of life for all residents in the region.

Local

St Helens Borough Local Plan Up To 2037 (July 2022)

6.40 The St Helens Borough Local Plan sets out the framework for the growth and development of the Borough. It identifies how and where new development and regeneration should take place and thereby promotes and manages the future development of the Borough.

6.41 The Local Plan includes a number of Core Policies. 2.22. Policy LPA01: Spatial Strategy echoes national planning policy regarding sustainability and states that:

‘New development will be directed to sustainable locations that are appropriate to its scale and nature and that will enable movements between homes, jobs and key services and facilities to be made by sustainable non-car modes of transport.’

6.42 It recognises at subsection 7 that:

‘Parkside West and Parkside East form transformational employment opportunity sites that will make a major contribution to the economic development of St Helens Borough, the Liverpool City Region and beyond. Development that prejudices their development in accordance with Policies LPA03, LPA09 and LPA10 will not be allowed.’

6.43 Policy LPA02: Development Principles further emphasises the need for sustainable development by requiring development to:

‘Minimise the need to travel and maximise the use of sustainable transport by:

a) Guiding development to sustainable and accessible locations or locations that can be made

sustainable and accessible;

b) Encouraging a shift towards more sustainable modes of transport for people, goods and freight and encouraging the use of lower carbon transport;

c) Encouraging safe and sustainable access for all, particularly by promoting the use of public transport, walking, and cycling between homes and employment; and

d) Supporting the provision and retention of shared space, community facilities and other local services (such as local shops, health facilities, education provision, meeting places, sports venues, cultural buildings, public houses, and places of worship).'

6.44 Policy LPA06: Transport and Travel focuses specifically on transport and sets out a series of requirements:

'The Council's strategic priorities for the transport network are to facilitate economic growth, enable good levels of accessibility between homes, jobs and services, improve air quality and minimise carbon emissions. To achieve these priorities, it will seek to:

a) Secure the delivery of new or improved road, rail, walking, cycling, and / or bus infrastructure where required;

b) Ensure that new development is sufficiently accessible by road transport, walking, cycling and public transport;

c) Secure improvements to existing motorway capacity and infrastructure with particular priority being given to the M6 Junction 23 and M62 Junction 7;

d) Improve the accessibility to jobs, homes and services by all modes of transport and protect opportunities to achieve such improvements;

e) Secure the delivery of:

i) a new rail station at Carr Mill;

ii) any necessary improvements to local stations and rail lines;

iii) the proposed Skelmersdale Rail Link; and

iv) any infrastructure required to deliver HS2 or HS3 (Northern Powerhouse Rail); ... and

f) Protect former railway lines and corridors from development that could hinder their future re-use for sustainable modes of transport.'

6.45 All proposals for new development that would generate significant amounts of transport movement must be supported by a Transport Assessment or Transport Statement, the scope of which must be agreed by the Council.

6.46 New development will only be permitted if it would:

'maintain the safe and efficient flow of traffic on the surrounding highway network. Development proposals will not be permitted where vehicle movements would cause severe harm to the highway network;

- a) be located and designed to enable a suitable level of access (having regard to the scale and nature of the proposal) to existing and / or proposed public transport services;*
- b) provide appropriate provision of charging points for electric vehicles;*
- c) enable good levels of accessibility by walking and cycling between homes, jobs and services;*
- d) provide for safe and convenient pedestrian, cycle and vehicular access and movement to, from and within the development;*
- e) include adequate access arrangements for emergency, service and refuse collection vehicles; and provide sufficient on-site parking for persons of limited mobility, service vehicles, and cycles that must at least meet the Council's minimum standards, and adequate parking for all other vehicles.'*

6.47 To minimise air and noise pollution and carbon emissions, non-residential forms of development that would generate a significant amount of transport movement by employees or visitors must be supported by suitably formulated Travel Plans. Conditions and/or legal agreements will be used to ensure that Travel Plans submitted in such cases are fully implemented and monitored.

6.48 Development that would generate significant movement of freight must be located where there is a safe, convenient, and environmentally acceptable access route to a suitable part of the Key Route Network. Access into a new development (of any land use) directly from the Key Route Network will only be allowed if this would not unduly restrict the capacity of the road or cause harm to highway safety, and where no more suitable alternative exists or would be provided by the development.

6.49 Direct access from new development on to the Strategic Road Network will only be permitted as a last resort, where agreed by National Highways and where the necessary levels of transport accessibility and safety could not be more suitably provided by other means.

6.50 Where rail facilities are available or would be made so as part of a development generating significant movement of freight, this will be regarded as a benefit.

6.51 Development proposals must not prevent or jeopardise the implementation of planned transport schemes unless it has been demonstrated to the satisfaction of the Council that:

- 'a) the transport scheme is no longer required;*
- b) there is a feasible and viable alternative to it; or*

c) the benefits of the proposed development would outweigh those of the planned transport scheme. Planned transport schemes include but are not limited to proposals for new or upgraded footpath, cycle path, bridleway, road, rail, bus and / or other public transport facilities that would be on the same site as, adjacent to or be otherwise affected by the development.'

6.52 Further details of the operation of this Policy, for example those related to the Council's vehicle and cycle parking standards, standards for vehicle charging point provision, and to the requirements concerning transport assessments, transport statements and travel plans are set out in St Helens Transport and Travel, Supplementary Planning Document (April 2024).

St Helens Transport and Travel Supplementary Planning Document (April 2024)

6.53 The Transport and Travel SPD builds upon policies set out in the St Helens Borough Council Local Plan up to 2037 and has been developed to provide consistent guidance to applicants on access and transport requirements for new developments and re-developments. It will be a material consideration in the determination of planning applications. It supersedes the 'Ensuring a Choice of Travel' (2010) SPD as well as 'Guidance Note for Travel Plans' (2016) and 'Guidance Notes for the Submission of Transport Assessments' (2016).

6.54 The document sets out the approach and expectations for new developments and re-developments, specifically in relation to walking, cycling, wheeling, public transport, ultra-low or zero emission vehicles, parking standards, freight management, air quality, noise and travel plans. The SPD states that the Council will assess applications based on the following priorities:

- A commitment to decarbonise transport.
- Prioritisation of vulnerable road users.
- A need to reduce car dependency, including unnecessary single occupancy private car trips.
- Increase the delivery of active travel (walking, cycling and wheeling).
- Increased commitment to the delivery of public transport.
- A need to provide supportive infrastructure for Zero Emissions Vehicles.
- Delivery of inclusive environments and mobility solutions.
- Achieve good street design and place-making, fostering social interaction and support health and well-being.

Wigan Local Plan (September 2013)

6.55 The Wigan Local Plan (September 2013) is a strategic document that outlines the development framework for Wigan Borough up to 2026. Its goal is to guide sustainable

growth, development, and regeneration in the area, balancing social, economic, and environmental factors.

Key Objectives:

- Sustainable Development: Promote development that meets current needs without compromising future generations, focusing on efficient use of land, energy, and resources.
- Housing: Provide sufficient housing to meet local needs, including affordable housing, with a target to build 22,500 new homes between 2011 and 2026.
- Economic Growth: Support economic development and job creation, with a focus on key employment areas and improving Wigan’s town centres.
- Transport and Infrastructure: Improve transport links, infrastructure, and connectivity to support growth, reduce congestion, and promote public transport, walking, and cycling.
- Environment and Green Spaces: Protect and enhance green spaces, biodiversity, and heritage sites, and address environmental challenges like flooding and climate change.
- Community Facilities: Enhance health, education, and leisure facilities to improve quality of life for residents.

Spatial Strategy:

- Focus on Wigan, Leigh, and Ashton as key areas for growth and regeneration.
- Brownfield sites (previously developed land) are prioritized for new housing and development.
- Protection of Green Belt areas to prevent urban sprawl and maintain the character of rural areas.

Implementation:

- 6.56 The Local Plan includes a series of policies and proposals that guide decision-making on planning applications and development control. It also identifies key areas for investment and regeneration, ensuring that development aligns with local and national planning policies.
- 6.57 In summary, the Wigan Local Plan (2013) sets out a long-term vision for sustainable growth and development in the borough, focusing on economic regeneration, housing, and infrastructure, while protecting the environment and improving quality of life for residents.
- 6.58 The key policies are set out in the Local Plan and the only reference to the Parkside West and Parkside East allocations is a recognition at Para 2.33 that they may offer jobs for people in the Borough.

Warrington Local Plan 2022/23 to 2038/39

- 6.59 While not in the draft Order Limits, on the basis that some development traffic from the

Proposed Development will travel on the Parkside Link Road (PLR) into and out of Warrington, it is appropriate to consider the primary transport policies in Warrington set in the context if the Proposed Development's impact is such that mitigation is required the policies become pertinent.

- 6.60 The Warrington Local Plan is a long-term strategy guiding the future development, growth, and infrastructure of Warrington. Its aim is to meet housing, employment, and environmental needs while ensuring sustainable development and enhancing the quality of life for residents.
- 6.61 From a transport planning perspective, the Warrington Local Plan focuses on creating a well-connected, efficient, and sustainable transport network to support the town's growth and development. Key transport-related elements include:

Sustainable Transport Options:

- Promotion of public transport: There is a strong emphasis on improving the bus and rail networks to encourage public transport use over private cars.
- Walking and cycling infrastructure: The plan includes the development of safer and more extensive walking and cycling routes, aiming to promote active travel and reduce the carbon footprint of transport.

Road Infrastructure Improvements:

- The plan highlights the need for road upgrades to manage traffic congestion and support the additional demand created by new housing and employment developments.
- Key routes, including those connecting to major employment and residential areas, will be expanded and improved to ensure better traffic flow.

Traffic Congestion Reduction:

- 6.62 The plan includes measures to mitigate traffic bottlenecks, such as the creation of new road links, junction upgrades, and better traffic management systems.

Strategic Transport Hubs:

- 6.63 Development of strategic transport hubs is a priority to improve interconnectivity between different modes of transport. This includes better integration of bus and rail services, particularly at key locations like Warrington town centre and regional employment hubs.

Sustainable and Low-Carbon Initiatives:

- There is a strong focus on reducing car dependency by promoting low-emission transport options, including electric vehicle (EV) infrastructure and encouraging the use of electric buses.
- The plan aims to align with climate change objectives, focusing on sustainable travel

modes and reducing transport-related carbon emissions.

Regional Connectivity:

- Warrington’s position between key cities like Manchester and Liverpool makes regional connectivity crucial. The plan addresses improvements in transport links to the broader North West region through enhanced rail and road corridors, supporting both economic and commuter flows.

Freight and Logistics:

- Given Warrington’s importance as a logistics hub, the plan includes provisions for better freight transport, including road and rail links, to support the growing logistics and distribution sectors.

Reducing Car Dependency in New Developments:

- New housing and employment sites will be designed with sustainable transport in mind, incorporating public transit, cycling, and walking options to reduce reliance on cars.

6.64 In summary, the Warrington Local Plan integrates transport improvements as a key enabler of sustainable growth. It balances road infrastructure upgrades with a strong commitment to enhancing public transport, promoting active travel, and aligning with climate and sustainability goals. This approach is intended to ensure that the town’s transport network can meet the demands of future growth while supporting a more environmentally friendly and efficient travel system.

CONSULTATION TO DATE

6.65 To date consultation has taken place with the relevant highway authorities and their technical advisors to discuss the proposed scope of the assessment.

6.66 The authorities consulted are:

- St Helens Council;
- Wigan Council;
- Warrington Council ; and
- National Highways

6.67 Each authority has, or is likely to have, independent advisors providing support through the Development Consent Order (DCO) process. Currently Mott MacDonald are advising St Helens, AECOM are advising Warrington, with WSP advising National Highways.

6.68 A summary of the independent consultation meetings that have been undertaken as at 31.10.24 are set out in Table 6.1. Prior to the meetings taking place technical notes were shared, with feedback received.

6.69 Further independent discussions will continue with the relevant highway authorities, as well as combined discussions and consultation as part of a Transport Working Group (TWG) which is yet to be established but will contain the above authorities and their advisors.

Table 6.1 Summary of Consultations and Discussions

Theme / Issue	Date	Consultee	Method	Summary of Discussion	Outcome / Output
Highways Scoping Discussions	27/07/23	St Helens Council	Teams	Preliminary discussion on assessment of highways matters	Clarity on Strategic Modelling Opportunities
Highways Scoping Discussions	14/08/23	National Highways	Teams	Preliminary discussion on assessment highways of matters	General discussion on assessment approaches
M6/J22 Improvements Overview	24/04/24	National Highways	Teams	Discussion on the potential M6/J22 improvements being considered by NH and programme	Understanding of NH's M6/J22 improvements timeline
Highways Scoping Discussions	24/06/24	St Helens Council	Teams	Preliminary discussion modelling matters	Clarity on Strategic Modelling Opportunities
Highways Scoping Discussions	12/07/24	National Highways	Teams	Introduction of ILPN RFI and the DCO process	Stated that the modelling work for the NH M6/J22 proposals is now complete and has been submitted to the DfT for review. There is currently no opportunity for the Applicant to use

Theme / Issue	Date	Consultee	Method	Summary of Discussion	Outcome / Output
					this model until the DfT review process has been completed.
Highways Scoping Discussions	09/09/24	Warrington Council Highways	Teams	Preliminary discussion on assessment of highways matters	General discussion on assessment approaches
Highways Scoping Discussions	10/09/24	Wigan Council Highways	Teams	Preliminary discussion on assessment of highways matters	General discussion on assessment approaches
Strategic Modelling discussions	01/10/24	Wigan Council Highways	Teams	Preliminary discussion on assessment of strategic modelling approaches	Provided clarity to Wigan Council on the approach which is being undertaken. Wigan highways in agreement in principle to the approach.
Strategic Modelling discussions	02/10/24	St Helens Council Highways	Teams	Preliminary discussion on assessment of strategic modelling approaches	Provided clarity to St Helens Council on the approach which is being undertaken. St Helens Highways in agreement in principle.
Strategic Modelling discussions	09/10/24	Warrington Council Highways	Teams	Preliminary discussion on assessment of strategic modelling approaches	Provided clarity to Warrington Council on the approach which is being undertaken. Warrington Highways in agreement in principle.
Strategic Modelling	08/10/24	National Highways	Teams	Preliminary discussion on	Provided clarity to National Highways on the approach

Theme / Issue	Date	Consultee	Method	Summary of Discussion	Outcome / Output
discussions				assessment of strategic modelling approaches	which is being undertaken. National Highways in agreement in principle

6.70 The consultations undertaken to date with the highway authorities have focussed on general approach, specifically relating to modelling and it has been agreed by all authorities that an update of the Parkside Link Road Highway Model (PLRHM) is the most appropriate modelling approach due to the network coverage being the most suitable to consider the impact of the Proposed Development.

BASELINE CONDITIONS AND MAIN ISSUES

Baseline Environment

- 6.71 In order to consider the base line conditions and the potential infrastructure improvements required to support the Proposed Development, a review of the planning history for the DCO Site was conducted. This review considered the previous traffic impact assessment completed for the highway network surrounding the DCO Site and mitigation work that was proposed.
- 6.72 The planning history for Parkside area dates back to 2001 when the first application for the Strategic Rail Freight Interchange (SRFI) was submitted. Following the submission of this application there have been various applications submitted for development at Parkside, the most significant of these are summarised being;
- Parkside Strategic Rail Freight Interchange (previous application);
 - Parkside West (various applications for phase 1 and 2); and
 - Parkside Link Road.
- 6.73 Of these applications the Parkside Link Road (PLR) application is the most relevant to the DCO Site as it relates to the creation of a new link road between A49 Winwick Road and M6 Junction 22 and includes the re-alignment of Parkside Road and other associated work. This road would form the key access route for the Proposed Development and serve as a link road through the DCO Site. The PLR is currently under construction and will be operational prior to any development at either Parkside West or the Proposed Development becoming operational.
- 6.74 A Transport Assessment [TA] was prepared to support the PLR planning submission. This assessment included a consideration of the impact of ILPN RFI on the strategic highway

network. As part of this work Ramboll – transport consultants for the PLR - developed a Saturn model to support the case for the development of the link road.

- 6.75 The primary purpose of the model was to test the impact of the PLR on the highway network including the M6 and M62 motorways and all strategic roads. In all, 13 junctions were assessed for capacity as agreed with St. Helens Council, Warrington Council, Wigan Council and National Highways.
- 6.76 The PLR TA also detailed infrastructure improvements which would be required to support the development of the PLR.
- 6.77 The following section of this note provides a summary of the junctions assessed as part of the PLR submission and summarises the proposed infrastructure improvements outlined in the PLR TA .

Previous Capacity Assessments

- 6.78 As part of the PLR application the following junctions were assessed;
- 1: Existing A49 Newton Road / Hollins Lane Signalised Junction;
 - 2: Existing A49 Newton Road / Delph Lane Signalised Junction;
 - 3: Existing A49 Newton Road / A49 Winwick Link Road Signalised Roundabout;
 - 4: Existing A49 Newton Road / A573 Golborne Road Priority Junction;
 - 5: Existing M62 Junction 9 / A49 Newton Road / A49 Winwick Lane Signalised Roundabout;
 - 6: Existing M6 Junction 22 / A579 Winwick Lane Roundabout;
 - 7: Existing A49 Mill Lane / A572 Southworth Road Signalised Junction;
 - 8: Existing A572 Southworth Road / A572 Newton Road / A573 Parkside Road / A573 Golborne Dale Road Staggered Priority Junction;
 - 9: Existing A580 East Lancashire Road / A573 Warrington Road / A573 Bridge Street Roundabout;
 - 10: Proposed A49 Newton Road / PLR West Signalised Junction;
 - 11: Proposed A573 Parkside Road / PLR West Signalised Junction;
 - 12: Proposed A573 Parkside Road / PLR East Roundabout; and,
 - 13: Proposed A579 Winwick Lane PLR East Roundabout.
- 6.79 This review considered the following assessment scenarios;
- 2024 Do Minimum;

- 2024 Do Something;
- 2034 Do Minimum; and
- 2034 Do Something.

6.80 The Do Minimum (DM) scenario included all proposed committed developments without the construction of the PLR. The Do Something (DS) scenario included all committed developments with the construction of the PLR.

6.81 The PLR application assumed a development quantum for the Parkside West as delivering 181,161 sq.m of floorspace (80% / 144,929 sq. m Class B8 and 20% / 36,232 sq. m Class B2), with Parkside East delivering 260,000 sq. m of floorspace.

6.82 Figure 6.1 provides an extract of Table 6.1 within the PLR TA which provides a summary of the operational assessment of the 13 junctions listed above.

6.83 Figures in blue indicated the junction "works", those in red indicated "capacity issues", "n/a" shows where junctions or scenarios were not assessed.

Figure 6.1 Extract of Table 6.1 from PLR TA

Junction No. & Name	2024 DM		2024 DS		2034 DM		2034 DS	
	AM	PM	AM	PM	AM	PM	AM	PM
1: A49 Newton Road / Hollins Lane	1,8%	0,2%	13,7%	10,9%	1,4%	3,1%	8,4%	14,3%
2: A49 Newton Road / Delph Lane	-21,5%	-191,5%	-34,4%	-141,4%	-31,0%	-410%	-46,3%	-422,1%
3: A49 Newton Road / A49 Winwick Link Road	7,0%	27,9%	21,2%	11,1%	1,5%	3,2%	13,7%	0,8%
4: A49 Newton Road / A573 Golborne Road	-14,0%	-10,0%	-11,0%	8%	-24%	-28%	-19%	-17%
5: M62 J9/ A49 Newton Road / A49 Winwick Lane	-36,3%	-30,1%	-23,2%	-34,4%	-36,7%	-188,3%	-39,9%	-188,5%
6: M6 Junction 22 / A579 Winwick Lane	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7: A49 Mill Lane / A572 Southworth Road	-19,7%	4,4%	-28%	-20,8%	-26,6%	-26,2%	-28,2%	-31,9%
8: A572 Southworth Rd / A572 Newton Rd / A573 Parkside Rd / A573 Golborne Dale Rd	-15,0%	-10,0%	-26,0%	-29,0%	-27,0%	-24,0%	-35,0%	-33,0%
9: A580 East Lancashire Road / A573 Warrington Road/A573 Bridge Street Rbt	-17,0%	-46,0%	-19,0%	-46,0%	-35,0%	-52,0%	-39,0%	-51,0%
10: A49 Newton Road / PLR West	n/a	n/a	3,3%	26,5%	n/a	n/a	1,6%	14,5%
11: A573 Parkside Road / PLR West	n/a	n/a	65,9%	116,7%	n/a	n/a	71,9%	48,5%
12: A573 Parkside Road / PLR East	n/a	n/a	40,0%	42,0%	n/a	n/a	28,0%	12%
13: A579 Winwick Lane / PLR East	n/a	n/a	70,0%	74,0%	n/a	n/a	74,0%	56,0%

Table 6.1: 2024 & 2034 DM & DS Operational Assessment Summary Table

6.84 This review highlights that the PLR junctions would operate within capacity in the DS scenarios in both 2024 and 2034. Figure 6.1 highlights that Junction 2, 4, 5, 7, 8 and 9 all operate over their theoretical capacity in the DM scenarios without the addition of PLR related traffic impact.

6.85 The following conclusions were drawn within the PLR TA;

- With the exception of Junction 7, all junctions along the A49 improve because of the implementation of the PLR;
- Junction 4 will continue to operate over capacity in all scenarios assessed however the assessment shows an improvement in the operation and capacity of the junction as a result of the link road due to traffic rerouting to the PLR;
- Junction 2 and Junction 5 will continue to operate over capacity. This assessment concluded that due to the operational issues in the DM scenarios during both peak periods resulting from future traffic growth which is not specifically related to the PLR scheme that no mitigation was required at these junctions; and
- Due to the impact of the PLR scheme on Junctions 6, 7 and 8 mitigation measures were proposed at these junctions.

PLR Proposed Infrastructure Improvements

6.86 As outlined previously, in response to the capacity assessments, junction improvements were proposed as part of the PLR application at the following junctions:

- Junction 6 - M6 Junction 22 / A579 Winwick Lane Roundabout;
- Junction 7 - Existing A49 Mill Lane / A572 Southworth Road Signalised Junction; and
- Junction 8 - Existing A572 Southworth Road / A572 Newton Road / A573 Parkside Road / A573 Golborne Dale Road Staggered Priority Junction.

Junction 6 Proposed Infrastructure Improvements

6.87 The following mitigation was proposed and tested for capacity at the M6 Junction 22 / A579 Winwick Lane Roundabout junction:

- All approaches at the roundabout signalised;
- The existing circulatory roundabout geometry retained however 3 lanes were proposed;
- Additional lane on the approaches to Winwick Lane and Winwick Link Road introduced;
- Pedestrian crossing facilities on the A49 Winwick Link Road and M6 southbound arms; and,

- The M6 southbound and northbound off-slips retained and not altered.

6.88 It should be noted that the results of the proposed mitigation as summarised highlights that the operation of the junction would improve if these measures were implemented. The new reconfiguration of the junction with signals helps the additional traffic created by the construction of the PLR to be accommodated at the junction.

Junction 7 Proposed Infrastructure Improvements

6.89 In agreement with SHMBC, the previous assessment proposed to amend the existing layout of the A49 Mill Lane / A572 Southworth Road Signalised junction. The proposals included the introduction of enhanced pedestrian and cycle crossing facilities by creating a dedicated left-turn lane from Southworth Road to Mill Lane and introducing a dedicated right-turn lane from Mill Lane to Southworth Road. This scheme has now been delivered.

6.90 The results of the revised capacity assessment indicate that the proposed alterations to the junctions would result in the junction operating within capacity for all DS future year scenarios.

Junction 8 Proposed Infrastructure Improvements

6.91 Due to the increase in traffic on the two minor arms (Golborne Dale Road and Parkside Road) during the forecast years, it was proposed to convert the junction from a priority junction to a signal-controlled junction. This scheme has now been delivered.

6.92 Results of the mitigation assessment indicate that the proposed signalised junction will significantly improve the operation of the junction.

Current Infrastructure Improvement Timeline

6.93 It is understood the construction of the PLR will be completed Q3/4 of 2024 and open in early 2025 after M6 Junction 22 widening of the circulatory carriageway and white lining works are complete.

PROPOSED APPROACH TO SURVEYS AND FURTHER BASELINE DATA COLLECTION

6.94 Following consultation with the local highway authorities and based on the review of the existing strategic models the following modelling approach is recommended to support ILPN SRFI:

- update of the PLRHM using latest version of SATURN software;
- update base year to 2024 with representation of weekday morning, interpeak, and evening peak hours taking account of traffic data collected in October 2024;
- potential extension of model area based on definition of an Area of Influence as part of the Transport Assessment (TA);

- data collection including highway link and junction surveys providing observed traffic flow, queue, and journey time data;
- calibration and validation of base model in line with DfT Transport Appraisal Guidance (TAG);
- traffic forecasting for ILP North opening year plus horizon year based on local authority planning data, committed highway infrastructure, and National Trip End Model (NTEM); and
- spreadsheet model to distribute ILP North development trips in line with the TA.

6.95 To update and expand the PLRHM a range of data is required and the following sets out the criteria being undertaken. These surveys will be undertaken prior to the closure of the neutral October month (excluding school holiday periods).

6.96 The data collection will include the following elements, which are discussed throughout the remainder of this section:

- Manual classified counts (MCC) recording vehicle classification, junction turning flows, and queue length data
- Automatic traffic counts (ATC) recording vehicle classification, traffic flows, and speeds
- Journey Time Data

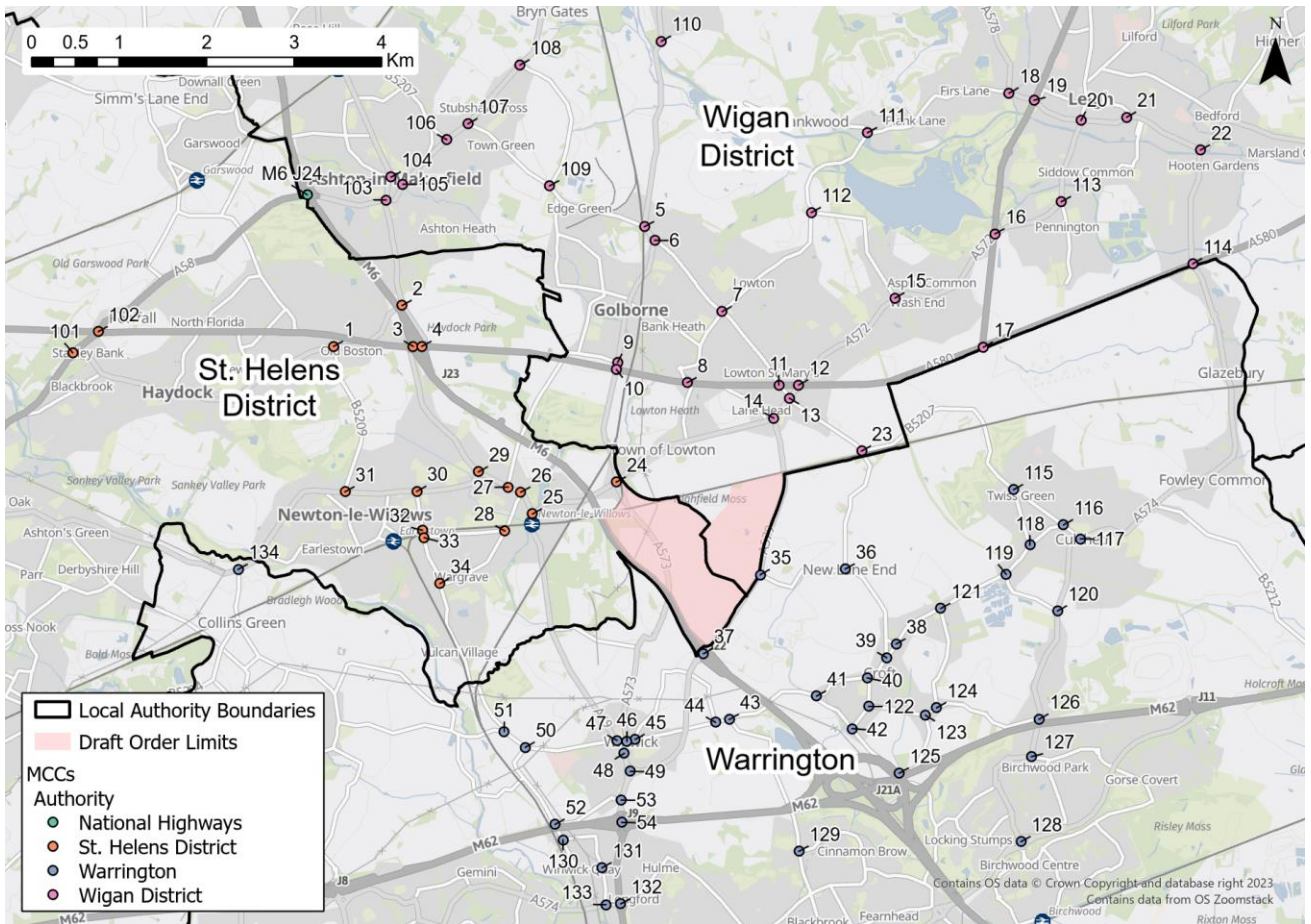
Overview

6.97 The following sections detail the required data collection. Data for each of the survey elements is required for a core area as detailed below. In addition, surveys may be required for optional areas which are detailed separately.

Manual Classified Counts (MCC)

6.98 Figure 6.2 illustrates the proposed location of core MCC surveys to be undertaken at junctions.

Figure 6.2 Core MCC Locations



6.99 The core junctions to be surveyed are:

Table 6.2 Core junctions to be surveyed

Number	Junction	Authority
A1	A599 Penny Lane	St. Helens District
A2	A580 East Lancashire Road - 1	St. Helens District
A3	A573 Bridge Street	Wigan District
A4	B5207 Church Lane	Wigan District
A5	A49 Newton Road - 2	Wigan District
A6	St Helens Road	Wigan District
A7	A759 Atherleigh Way	Wigan District
A8	A580 East Lancashire Road - 2	Wigan District
A9	Kenyon Lane	Wigan District
A10	A49 Newton Road - 3	Wigan District
A11	Warrington Road	Wigan District
A12	A49 Ashton Road	St. Helens District
A13	B5209 Vista Road	St. Helens District

Number	Junction	Authority
A14	A752 Crow Lane West	St. Helens District
A15	A572 Southworth Road	St. Helens District
A16	A759 Winwick Lane - 1	Warrington
A17	Kenyon Lane	Warrington
A18	A579 Winwick Lane - 2	Warrington
A19	A753 Parkside Road	Warrington
A20	A49 Newton Road - 1	Warrington
A21	Wargrave Road	St. Helens District
A22	Hollins Lane	Warrington
A23	Myddleton Lane	Warrington
A24	A49 Winwick Link Road	Warrington
A25	Smithy Brow	Warrington
A26	Dam Lane	Warrington
A27	A49 Newton Road - 4	Warrington
A28	Mill Lane	Warrington
A101	Wigan Road	Wigan District
A102	Bolton Road	Wigan District
A103	Golborne Road	Wigan District
A104	Riding Lane	Wigan District
A105	Wigan Road	Wigan District
A106	Slag Lane - 2	Wigan District
A107	St Helens Road	Wigan District
A108	A56 Liverpool Road	St. Helens District
A109	Lodge Lane	Wigan District
A110	Slag Lane - 1	Wigan District
A111	A580 East Lancashire Road	Wigan District
A112	Clipsey Lane	St. Helens District
A113	A752 Common Road	St. Helens District
A114	Wilton Lane	Warrington
A115	Common Lane	Warrington
A116	Warrington Road - 1	Warrington
A117	Warrington Road - 2	Warrington
A118	Birchwood Park Avenue	Warrington
A119	Cross Lane	Warrington
A120	Spring Lane	Warrington
A121	Mill House Lane	Warrington
A122	Delph Lane	Warrington
A123	A49 Winwick Road	Warrington
A124	Calver Road	Warrington
A125	Alder Lane	Warrington
J23 - J24	M6 between junction 23 and junction 24	National Highways
J22 - J23	M6 between junction 22 and junction 23	National Highways
J21A - J22	M6 between junction 21A and junction 22	National Highways

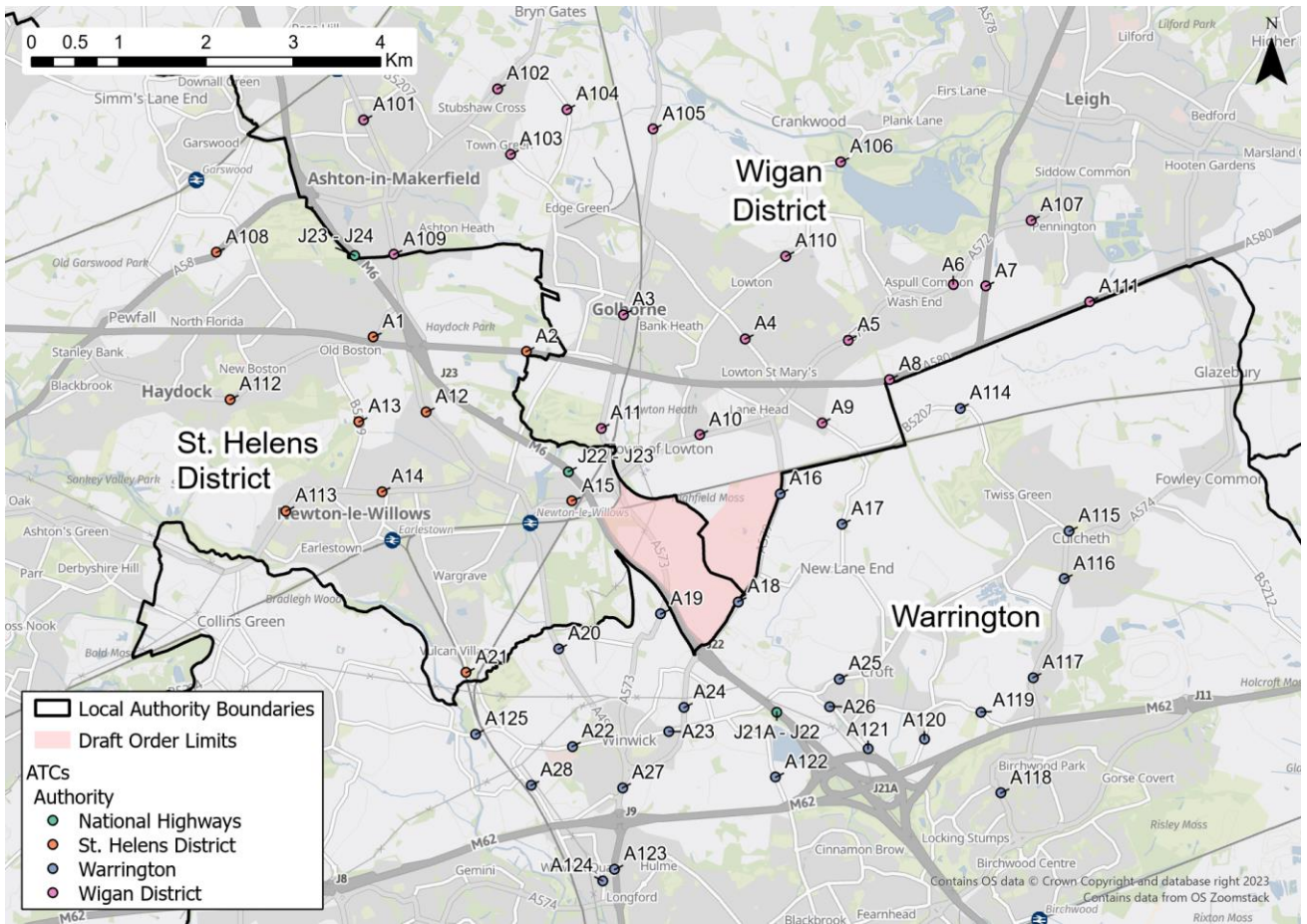
MCC data collection is to be provided to the following specification:

- neutral weekday (Tuesday, Wednesday or Thursday) in October 2024 prior to school holidays
- between 0600 and 2000 hours and survey companies should note if there are any expected issues with daylight levels affecting data quality during this period
- turning flow data to be collected:
 - in 15-minute intervals fully classified (as a minimum) into Cars/Taxis, Light Goods Vehicles (LGV) and Heavy Goods Vehicles (HGV) (Other Goods Vehicle 1 (OGV1) and Other Goods Vehicles 2 (OGV2) separately), Public Service Vehicles (Bus/Coach), Motorcycles and pedal cycles
- summary analysis including the identification of the combined network peak hour for the morning (0700-1000), inter-peak (1000-1600) and evening period (1600-1900)
- queue length data to be collected:
 - in 5-minute intervals per lane on each junction approach
 - queue lengths should be measured on internal stop lines at large junctions
 - flow and queue data to be provided in Excel format
- a summary report should be prepared providing a note of the survey conditions and the methodologies, parameters and assumptions
- video data should be provided in a “Microsoft Windows” compatible format

Automatic Traffic Counts (ATC)

6.100 The proposed locations of the core ATC surveys are illustrated in Figure 6.3.

Figure 6.3 Core ATC Survey Indicative Locations



6.101 The core ATC links to be surveyed are:

Table 6.3 Core ATC links to be surveyed

Number	Junction	Authority
A1	A599 Penny Lane	St. Helens District
A2	A580 East Lancashire Road - 1	St. Helens District
A3	A573 Bridge Street	Wigan District
A4	B5207 Church Lane	Wigan District
A5	A49 Newton Road - 2	Wigan District
A6	St Helens Road	Wigan District
A7	A759 Atherleigh Way	Wigan District
A8	A580 East Lancashire Road - 2	Wigan District
A9	Kenyon Lane	Wigan District
A10	A49 Newton Road - 3	Wigan District
A11	Warrington Road	Wigan District
A12	A49 Ashton Road	St. Helens District
A13	B5209 Vista Road	St. Helens District
A14	A752 Crow Lane West	St. Helens District

Number	Junction	Authority
A15	A572 Southworth Road	St. Helens District
A16	A759 Winwick Lane - 1	Warrington
A17	Kenyon Lane	Warrington
A18	A579 Winwick Lane - 2	Warrington
A19	A753 Parkside Road	Warrington
A20	A49 Newton Road - 1	Warrington
A21	Wargrave Road	St. Helens District
A22	Hollins Lane	Warrington
A23	Myddleton Lane	Warrington
A24	A49 Winwick Link Road	Warrington
A25	Smithy Brow	Warrington
A26	Dam Lane	Warrington
A27	A49 Newton Road - 4	Warrington
A28	Mill Lane	Warrington
A101	Wigan Road	Wigan District
A102	Bolton Road	Wigan District
A103	Golborne Road	Wigan District
A104	Riding Lane	Wigan District
A105	Wigan Road	Wigan District
A106	Slag Lane - 2	Wigan District
A107	St Helens Road	Wigan District
A108	A56 Liverpool Road	St. Helens District
A109	Lodge Lane	Wigan District
A110	Slag Lane - 1	Wigan District
A111	A580 East Lancashire Road	Wigan District
A112	Clipsey Lane	St. Helens District
A113	A752 Common Road	St. Helens District
A114	Wilton Lane	Warrington
A115	Common Lane	Warrington
A116	Warrington Road - 1	Warrington
A117	Warrington Road - 2	Warrington
A118	Birchwood Park Avenue	Warrington
A119	Cross Lane	Warrington
A120	Spring Lane	Warrington
A121	Mill House Lane	Warrington
A122	Delph Lane	Warrington
A123	A49 Winwick Road	Warrington
A124	Calver Road	Warrington
A125	Alder Lane	Warrington
J23 - J24	M6 between junction 23 and junction 24	National Highways
J22 - J23	M6 between junction 22 and junction 23	National Highways
J21A - J22	M6 between junction 21A and junction 22	National Highways

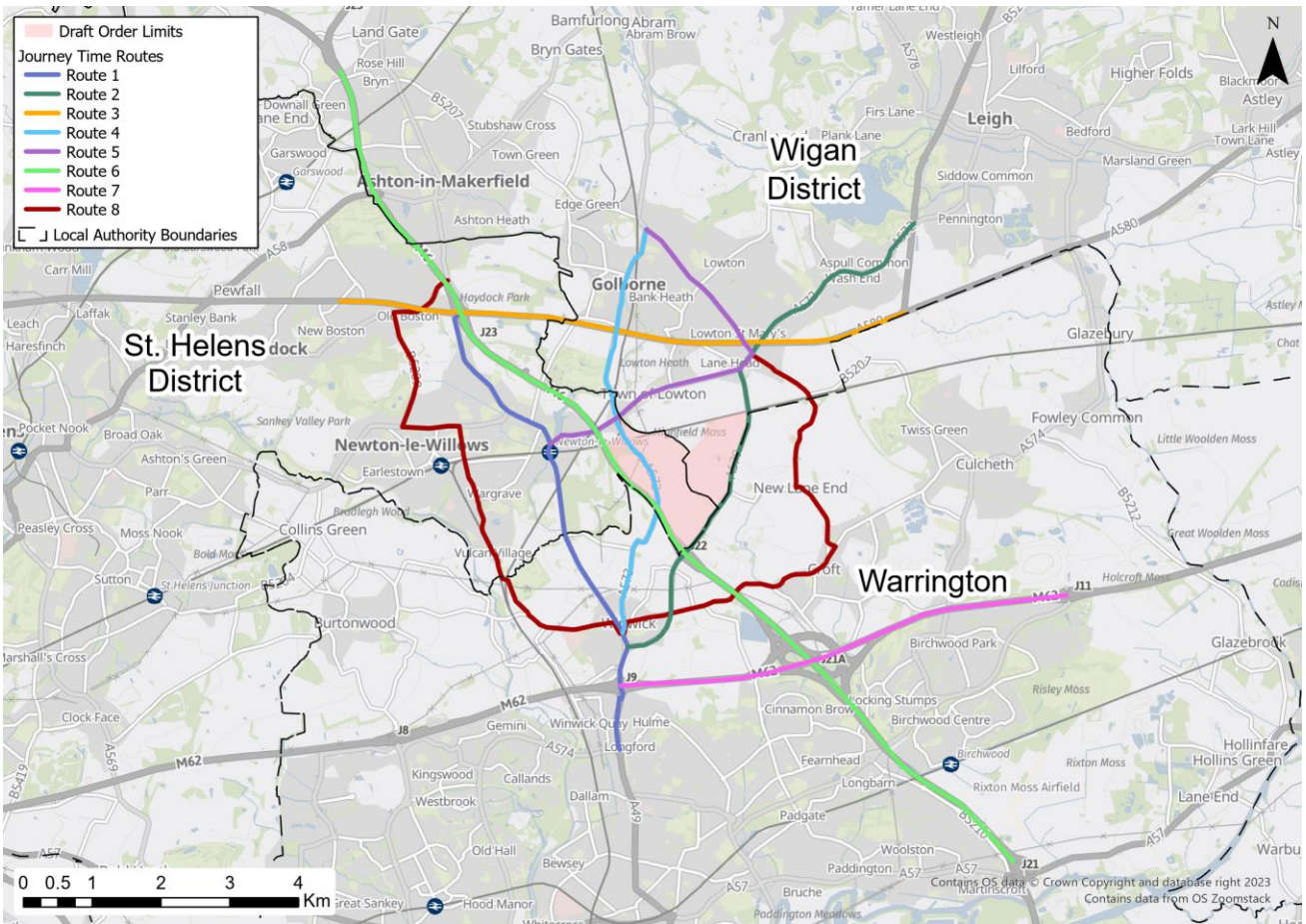
6.102 ATC data is to be provided to the following specification:

- two-way traffic volumes and speeds
- the two-week period should be inclusive of the days on which the MCC surveys are undertaken
- exact locations of ATCs to be determined and agreed with Stantec, based on availability of street furniture to attach equipment (if required) and agreement with the highway authority
- data to be fully classified (as a minimum) into Cars/Taxis, LGV, OGV1, and OGV2 - quotes should indicate the vehicle classifications that proposed to be provided
- data recorded in 15-minute intervals and summarised hourly by direction
- analysis of vehicle speeds including 85th percentile speeds by direction
- flow and speed data to be provided in Excel format
- a summary report should be prepared providing a note of the survey conditions and any issues with data, for example, if there were any missing days and how this has been dealt with in the analysis

Journey Time Data

6.103 Journey time data is needed to inform the study area. Journey times are proposed by direction as shown in Figure 6.4.

Figure 6.4 Journey time requirements



6.104 These routes include:

Table 6.4 Journey time routes

Route	Location
Route 1	A580 East Lancashire Road / M6 roundabout to A49 Winwick Road / Sandy Lane West/A574 Cromwell Avenue roundabout
Route 2	A49 Newton Road / A49 Winwick Link Road / Winwick Park Avenue roundabout to A572 St Helens Road / A759 Atherleigh Way junction
Route 3	A580 East Lancashire Road (at the point where Piele Road passes underneath) to

Route	Location
	A580 East Lancashire Road (where it crosses the A579 Atherleigh Way)
Route 4	A573 Church Street / A573 Ashton Road / Winnard Street / B5207 Lowton Road junction to A49 Newton Road / A573 Golborne Road junction
Route 5	A49 Church Street / A572 Southworth Road / A49 Mill Lane junction to A573 Church Street / A573 Ashton Road / Winnard Street / B5207 Lowton Road junction
Route 6	A580 East Lancashire Road / M6 roundabout to M62 (where the M6 passes underneath)
Route 7	A49 Newton Road / M62 roundabout to M62 (where the M6 passes underneath)
Route 8	A49 Lodge Lane / A599 Penny Lane junction to A572 Newton Road / B5207 Kenyon Lane / B5207 Church Lane staggered junction

6.105 The journey time data is to be provided to the following specification:

- representative of neutral weekday (Tuesday, Wednesday or Thursday) in same two-week window as MCC and ATC surveys
- should cover a 12-hour period (0700-1900) reported as average hourly journey times
- be provided at a disaggregate level (i.e. the routes above should be broken down into individual highway links)

APPROACH AND METHODOLOGY

6.106 At this stage the full approach and methodology of assessment is still to be developed and agreed with the respective LPA / LHAs (and associated advisors) plus National Highways (NH), however from provisional discussions with the authorities a vision and validate approach, while utilising the Parkside Link Road Saturn Model, has been requested due to the network coverage being the most suitable to consider the impact of the Proposed Development.

6.107 Operational modelling of (to be identified) individual junctions will also be required to support detailed discussions with the LPA / LHAs, this will take the form of bespoke microsimulation modelling and / or industry standard junction modelling software.

6.108 In transport planning terms, a vision and validate approach contrasts with traditional predict and provide methods, offering a more sustainable and proactive strategy for shaping

transportation systems. A breakdown of what this approach entails and how it is validated is set out below:

Vision and Validate Approach

Vision:

- **Goal-Oriented:** It starts with a clear, aspirational vision of the desired future state of the transportation system. This vision often aligns with long-term goals such as reducing carbon emissions, increasing public transport usage, enhancing walkability, and promoting equitable access.
- **Sustainability and Liveability:** The vision prioritises outcomes like environmental sustainability, public health, and quality of life. It seeks to create systems that serve people, reduce congestion, minimise environmental impacts, and foster vibrant, inclusive communities.
- **Multi-Modal Focus:** A key element of the vision is a shift away from car-centric infrastructure to a more balanced multi-modal approach that includes walking, cycling, public transport, and new mobility solutions like car-sharing or micro-mobility (e.g., e-scooters, bike-sharing).
- **Policy Frameworks:** The vision is often embedded within broader urban development or climate change goals, such as achieving net-zero emissions by a specific year, or improving air quality in cities.

Validate:

- **Scenario-Based Planning:** Rather than simply reacting to forecasts of future demand, the validate phase involves testing different scenarios that align with the vision. Planners assess what policies, technologies, and infrastructure are required to realise the vision.
- **Data-Driven:** Planners use a variety of data sources, including traffic models, public transport usage patterns, environmental impact assessments, and social surveys, to evaluate the feasibility and impact of the proposed vision.
- **Performance Metrics:** Key performance indicators (KPIs) are defined and tracked over time. These might include reductions in vehicle miles travelled (VMT), greenhouse gas emissions, improvements in travel time for public transport users, or increased modal share for cycling and walking.
- **Feedback Loops:** Regular validation is necessary to ensure that the vision remains realistic and adaptive. Adjustments are made based on observed outcomes, emerging technologies (e.g., autonomous vehicles, electric vehicles), and evolving societal needs (e.g., changing demographics, remote work patterns).
- **Community Engagement:** Validation also comes from extensive stakeholder and community engagement. Public consultations, workshops, and feedback mechanisms

help ensure that the vision reflects the needs and values of local populations.

Our approach to assessment

- 6.109 A comprehensive study will be undertaken in order to understand and mitigate the impacts of the development upon the local highway network. This assessment follows the EIA Regulations and other pertinent local and national guidance/policy documents.
- 6.110 A Transport Chapter will be prepared for inclusion in the Environmental Statement (ES) with the submission consisting of:
 - ES Transport Chapter;
 - Transport Assessment (TA);
 - Sustainable Transport Strategy;
 - Framework Travel Plan (TP);
 - draft Construction Traffic Management Plan (CTMP); and
 - Operational HGV Routing Strategy
- 6.111 The above documents will all be submitted to the Planning Inspectorate (PINS) as part of the DCO application.
- 6.112 In preparation, and to agree the assessment methodologies, thorough consultation is currently being undertaken.

Table 6.5 Category of effects

Effects scoped in and to be considered within the Transport Chapter	Effects scoped in and to be considered in chapters elsewhere in the ES
<ul style="list-style-type: none"> • Severance • Driver Delay • Walk, Wheel, Cycle Delay • Pedestrian Amenity • Fear and Intimidation • Accidents and Safety • Climate change 	<ul style="list-style-type: none"> • Air Quality • Noise • Landscape • Ecology • Cultural Heritage • Flood Risk • Hydrogeology • Ground Conditions • Materials and Waste • Energy

Scope of Transport Assessment

6.113 The Transport Assessment will be subdivided into the following sections:

- Introduction
- National, Regional, and Local Policy
- Existing Highway Conditions (SRN/local highway network and surrounding villages)
- Accessibility
- Development Proposal
- Transport Strategy
- Trip Generation and Distribution
- Traffic Impact Analysis
- Mitigation
- Summary and Conclusions

Scope of the Framework Travel Plan

6.114 As well as a Transport Assessment a site wide Framework Travel Plan will also be prepared for the DCO Site which will set out initiatives and measures to be brought forward to promote and enhance the sustainable accessibility of the DCO Site for staff and visitors.

6.115 The scope of the Travel Plan will include:

- Introduction
- Accessibility/baseline review
- Aims/objectives
- Mode shift target setting
- Measures and initiatives
- Programme of monitoring and review

Scope of the Draft Construction Traffic Management Plan

6.116 In support of the Proposed Development a Framework Construction Traffic Management Plan (CTMP) will be produced. All construction activities will be obliged to follow the procedures as set out herein. The Framework CTMP would be expanded by the lead contractor (once

appointed) who would produce a detailed CTMP in line with their operational procedures and additional information.

6.117 The scope of the Framework CTMP is set out as follows:

- Introduction
- Existing Situation
- Construction Programme and Vehicle Movements
- Construction Traffic Routes
- Construction Traffic Management
- Construction Workforce
- Noise, Air Quality and Waste Management
- Monitoring and Mitigation

Scope of the Operational HGV Routing Strategy

6.118 A Operational HGV Routing Strategy) will be prepared for the DCO Site as a whole. The purpose is to ensure that traffic and travel in respect of route choices and timing of movements is controlled as far as practical, in agreement with the local highway authorities, and enforceable in planning.

6.119 It is recognised that each occupier within the DCO Site is likely to have different requirements with regard to their operational procedures. Therefore, in the future all occupiers on the DCO Site would be expected to develop their own Operational HGV Routing Strategy that accord with the framework.

PRELIMINARY ASSESSMENT OF POTENTIAL EFFECTS

6.120 The EIA will assess the following topics as identified in the IEMA Guidance for assessment::

- Severance
- Driver Delay
- Pedestrian Delay
- Pedestrian Amenity
- Fear and Intimidation
- Accidents and Safety
- Climate change

6.121 The extent/scope of assessment will be informed by the PLRHM, which will inform where and at what level changes in traffic levels are expected to occur.

Trip Generation

6.122 The ILPN RFI would generate the following trip types:

- Rail freight terminal
- HGV trips internal
 - HGV trips external
 - Employee/visitor trips
- B8 Warehousing with rail freight terminal operational:
 - LGV trips internal
 - LGV trips external
 - HGV trips internal
 - HGV trips external
 - Employee/visitor trips
- B8 Warehousing with rail freight terminal not operational (early phase development):
 - LGV trips external
 - HGV trips external
 - Employee/visitor trips

PROPOSED AVOIDANCE AND MITIGATION MEASURES

6.123 Our approach to mitigation is informed by over-arching planning policy tests, as set out in the NPSNN, which states:

“5.281 Mitigation measures for schemes should be proportionate and reasonable, focussed on facilitating journeys by active travel, public transport, shared transport and cleaner fuels.

5.282 Where development would worsen accessibility, there is a strong expectation that such impacts should be mitigated. Where impacts cannot be mitigated, the applicant is required to provide reasoning as to why impacts cannot be mitigated.

5.283 The applicant should provide evidence that the development improves the operation of the network and assists with capacity issues.”

6.124 In addition, in relation to rail freight interchange development paragraph 5.285 states:

6.125 *“For Strategic Rail Freight Interchanges, travel planning should be undertaken for all major developments which generate significant amounts of transport movement. There may be circumstances where the implementation of travel plan measures alone would not be sufficient to reduce the traffic demand of a project to acceptable levels. In such instances, the applicant should align with the agreements made with relevant highway authority, local planning authority, and Great British Railways Transition Team, as appropriate.”*

Imposed operational/management measures

6.126 Matters such as:

- Construction Traffic Management Plan;
- Operational HGV Routing Strategy;
- Sustainable Transport Strategy; and
- Framework Travel Plan.

Off-site highway improvements

6.127 Matters such as:

- Pedestrian/cycle infrastructure upgrades;
- Public transport provision/upgrades;
- Junction capacity improvements;
- Traffic calming/safety measures; and
- Traffic management measures.

UNCERTAINTIES

6.128 At this early stage a significant body of work needs to be completed and agreed with the relevant highway authorities. It has been agreed that the PLRHM is an appropriate basis for modelling work associated with the Proposed Development, which the PLR is designed to serve.

6.129 Until such time that the assessment is completed uncertainty will remain on the potential impact of the Proposed Development and any associated mitigation that may be required.

SUMMARY OF PROPOSED EIA SCOPE

Table 6.6 Summary of Transport Planning impacts proposed to be scoped in and out of the EIA

Impacts	Scoped in or out?	Justification
Construction		
Construction traffic travelling to and from the DCO Site.	Out	The volume of construction traffic has not been determined in detail at this stage but based on previous experience it is not expected to represent a significant increase in traffic, and additional flows on any existing links would be below the 10% increase in traffic set out in the IEMA assessment threshold rules. The operational flows associated with the DCO Site (as below) are expected to reach a higher volume than construction related traffic. Please note there may be some overlap between the construction phase and operational phase (whilst some units are built and occupied). This overlap will be short-term/temporary in nature and professional judgement indicates that the overall traffic volumes will be less than that of the fully operational scenario.
Operation		
Anticipated levels of employment and operational traffic (LGV and HGV's) to be generated by the DCO Site	In	Given the scale of development and likely traffic flows

Chapter 7 ◆ Air Quality

INTRODUCTION

- 7.1 This chapter outlines the scope and methodology for the assessment of likely significant effects arising from the Proposed Development, which is described in Chapter 3: The Proposed Development, in respect to Air Quality.
- 7.2 It sets out sensitive receptors of relevance, and the approach to the baseline data gathering and assessment of the Proposed Development's impacts during construction and operation.
- 7.3 Should the transport modelling undertaken for the Proposed Development identify the need for further highway mitigation works, this will be subject to the same level of assessment at the later stages of the EIA process.
- 7.4 In line with the EIA Regulations, this Scoping Report chapter has been compiled by appropriately qualified, experienced, and competent experts. The author of this chapter is Emily Macey BSc (Hons) MSc MIAQM MEnvSc, an air quality consultant. This chapter has been reviewed by Jethro Redmore BEng (Hons) MSc CEnv PIEMA MIAQM MEnvSc, director of Redmore Environmental, with 19 years of relevant UK experience.

RELEVANT LAW, POLICY AND GUIDANCE

- 7.5 The DCO will be assessed against the Infrastructure Planning (Decisions) Regulations 2010 and National Networks National Policy Statement ('NPSNN', adopted 2024). The National Planning Policy Framework ('NPPF', 2023) and relevant local planning policy are material considerations.

Legislation

- 7.6 The following section provides the legislation relevant to this chapter.
- 7.7 Air Quality Limit Values (AQLVs) are legally binding parameters not to be exceeded. They comprise set concentrations for specific pollutants, an averaging period for measurement and a date by which this must be achieved. The Air Quality Standards Regulations (2010) and subsequent amendments include AQLVs for the following pollutants:
 - Nitrogen dioxide (NO₂);
 - Sulphur dioxide;
 - Lead;
 - Particulate matter with an aerodynamic diameter of less than 10µm (PM₁₀);

- Particulate matter with an aerodynamic diameter of less than 2.5µm (PM_{2.5});
- Benzene; and,
- Carbon monoxide.

7.8 Air Quality Target Values were also provided for several additional pollutants. These are values set out in the same way as the AQLVs. They are to be attained where possible by the target date by taking all necessary measures not entailing disproportionate costs.

7.9 The Air Quality Strategy (AQS) was produced by DEFRA and published on 28th April 2023¹. The document contains standards, objectives and measures for improving ambient air quality, including a number of Air Quality Objectives (AQOs). These are maximum ambient pollutant concentrations that are not to be exceeded either without exception or with a permitted number of exceedences over a specified timescale. These are generally in line with the AQLVs, although the requirements for the determination of compliance vary.

7.10 The Environmental Improvement Plan 2023² was published in January 2023, providing long term and Interim Targets in order to reduce population exposure to PM_{2.5}. The concentration target for 2040 was subsequently adopted in the Environmental Targets (Fine Particulate Matter) (England) Regulations (2023).

7.11 Table 7.1 presents the AQOs and Interim Target for pollutants considered within the Air Quality Assessment (AQA).

Table 7.1 Air Quality Objectives/Interim Target

Pollutant	Air Quality Objective/Interim Target	
	Concentration (µg/m ³)	Averaging Period
NO ₂	40	Annual mean
	200	1-hour mean, not to be exceeded on more than 18 occasions per annum
PM ₁₀	40	Annual mean
	50	24-hour mean, not to be exceeded on more than 35 occasions per annum

¹ AQS: Framework for Local Authority Delivery, DEFRA, 2023.

² Environmental Improvement Plan 2023, DEFRA, 2023.

Pollutant	Air Quality Objective/Interim Target	
	Concentration (µg/m ³)	Averaging Period
PM _{2.5}	12 ^(a)	Annual mean

Note: (a) Interim Target to be achieved by end of January 2028.

7.12 Table 7.2 summarises the advice provided in DEFRA guidance³ on where the AQOs for pollutants considered within this report apply.

Table 7.2 Examples of Where the Air Quality Objectives Apply

Averaging Period	Objective Should Apply At	Objective Should Not Apply At
Annual mean	All locations where members of the public might be regularly exposed Building façades of residential properties, schools, hospitals, care homes etc.	Building façades of offices or other places of work where members of the public do not have regular access Hotels, unless people live there as their permanent residence Gardens of residential properties Kerbside sites (as opposed to locations at the building façade), or any other location where public exposure is expected to be short term
24-hour mean	All locations where the annual mean objective would apply, together with hotels Gardens of residential properties	Kerbside sites (as opposed to locations at the building façade), or any other location where public exposure is expected to be short term
1-hour	All locations where the annual mean and 24 and 8-hour mean objectives	Kerbside sites where the public would

³ Local Air Quality Management Technical Guidance (TG22), DEFRA, 2022.

Averaging Period	Objective Should Apply At	Objective Should Not Apply At
mean	<p>apply. Kerbside sites (for example, pavements of busy shopping streets)</p> <p>Those parts of car parks, bus stations and railway stations etc which are not fully enclosed, where members of the public might reasonably be expected to spend one hour or more</p> <p>Any outdoor locations where members of the public might reasonably be expected to spend one hour or longer</p>	not be expected to have regular access

National Policy Statement for National Networks NPS (NPSNN)

7.13 Paragraphs 5.7 to 5.16 of the National Networks NPS⁴ (NPSNN) provides guidance on generic air quality impacts and their assessment. Paragraph 5.13 of the NPSNN states that the environmental statement should describe:

- Existing air quality emissions and concentrations;
- Forecasts of emissions and concentrations at the time of opening, assuming that the scheme is not built (the future baseline) and taking account of the impact of the scheme;
- Any significant air quality effects, their mitigation and any residual effects, distinguishing between the construction and operation stages and taking account of the impact of any road traffic generated by the project;
- The predicted emissions, concentration change and absolute concentrations of the proposed project after mitigation methods have been applied;
- Any potential impacts on nearby designated habitats from air pollutants; and,
- The proximity and nature of nearby receptors which could be impacted, including those more sensitive to poor air quality

7.14 Paragraph 5.15 of the NPSNN advises that the assessment should take Defra's future projections of UK air pollutant emissions into account and provide judgement on whether the project would affect the UK's ability to comply with the Air Quality Standards Regulations

⁴ NPSNN, Department for Transport, 2024.

(2010).

National Planning and Guidance

7.15 The revised National Planning Policy Framework⁵ (NPPF) was published in December 2023 and sets out the Government's planning policies for England and how these are expected to be applied.

7.16 The purpose of the planning system is to contribute to the achievement of sustainable development. In order to ensure this, the NPPF recognises three overarching objectives including the following of relevance to air quality:

'c) an environmental objective - to protect and enhance our natural, built and historic environment, including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.'

7.17 Chapter 15 of the NPPF details objectives in relation to conserving and enhancing the natural environment. It states that:

'Planning policies and decisions should contribute to and enhance the natural and local environment by:

[...]

e) preventing 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. Development should, wherever possible, help to improve local environmental conditions such as air and water quality [...].'

7.18 The NPPF specifically recognises air quality as part of delivering sustainable development and states that:

'Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications/ Planning decisions should ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local air quality action plan.'

⁵ NPPF, Ministry of Housing, Communities and Local Government, 2021.

Regional Planning Policy

Liverpool City Region

7.19 The Liverpool City Region (LCR) Combined Authority is currently preparing the Spatial Development Strategy which will set out the strategic planning framework for future developments. Review of the draft document entitled ‘Towards a Spatial Development Strategy for the Liverpool City Region up to 2040’⁶ indicated the following policies of relevance to this assessment:

‘Policy LCR SS1 – Liverpool City Region Spatial Strategy

To create and maintain sustainable places and communities and deliver a more prosperous and inclusive economy, development, including the provision for a minimum of 83,600 new homes and a minimum of 521 hectares of employment land between 2021 and 2040, will be directed to sustainable locations. Development will be focussed on Liverpool City Centre, the Inner Urban Area and the Wider Urban Area.

These areas will be the strategic priority for development, providing the city region’s focal points for employment, retail and other commercial and professional activities, as well as culture and tourism destinations. They provide access to sustainable transport and are a focus for improving the interchange facilities required to strengthen sustainable transport provision, create vibrant and attractive city and town centres which are fundamental to the sustainable development of the city region. These areas will continue to be the focus for investment, environmental enhancement and regeneration.

Sustainable growth will be achieved by:

[...]

Minimising adverse impacts of pollution and help achieve improvements in air quality.

[...]

‘Policy LCR DP5 – Impacts on Health

Development plans and proposals should plan positively to ensure that adverse impacts on human health are avoided or mitigated. This will be achieved by:

a) Securing opportunities to improve, and minimise the impacts on air quality from new development, ensuring that proposals do not lead to any significant deterioration in air quality, impede the objectives of an Air Quality Management Area or Action Plan, or lead to the declaration of a new Air Quality Management Area;

[...]

c) Ensuring development does not have an unacceptable impact on health, including by air,

⁶ Towards a Spatial Development Strategy for the Liverpool City Region up to 2040, LCR, 2023.

water, light and noise pollution, nuisance, dust, odours, vibration, land instability and land contamination;

[...]

'Policy LCR DP7 – The Natural Environment and Nature Recovery

In recognition of its importance in supporting nature recovery, mitigating and adapting to climate change and offering health and wellbeing benefits, development plans and proposals should plan positively for the city region's natural environment by:

[...]

- 7.20 *Ensuring development does not give rise to unacceptable impacts (including cumulatively) on the natural environment in terms of pollution (including air quality, water quality, light and noise), contamination, land instability or degradation.'*
- 7.21 The above policies will be taken into consideration throughout the undertaking of the assessment.

Greater Manchester

- 7.22 The 'Places for Everyone Joint Development Plan Document'⁷ was adopted by the Greater Manchester Combined Authority (GMCA) on 21st March 2024. Review of the document indicated the following policies of relevance to this assessment:

'Policy JP-S5: Clean Air

A comprehensive range of measures will be taken to support improvements in air quality, focusing particularly on locations where people live, where children learn and play, where there are impacts on the green infrastructure network and where air quality targets are not being met, including:

- 1. Locating and designing development, and focusing transport investment, so as to reduce reliance on forms of transport that generate air pollution;*
- 2. Determining planning applications having regard to the most recent development and planning control guidance published jointly by the Institute of Air Quality Management (IAQM) and Environmental Protection UK (EPUK), and the most recent IAQM Guidance on the Assessment of Dust from Demolition and Construction, or relevant successor guidance, including the requirement for developers to submit construction management plans as appropriate;*
- 3. Requiring applications for developments that could have an adverse impact on air quality to submit relevant air pollution data so that adverse impacts on air quality can be fully assessed and development only permitted where they are acceptable and/or suitable*

⁷ Places for Everyone Joint Development Plan Document, GMCA, 2024.

mitigation can be provided;

- 4. Restricting developments that would generate significant point source pollution such as some types of industrial activity and energy generation;*
- 5. Significantly expanding the existing commercial network of electric vehicle charging points, both for public and private use, including as part of new developments;*
- 6. Implementing the Clean Air Plan and associated measures;*
- 7. Facilitating the more sustainable distribution of goods within the urban area, including through accommodating urban consolidation centres and urban distribution centres that use ultra-low-emission vehicles, and local delivery facilities to reduce repeat delivery attempts;*
- 8. Designing streets to avoid trapping air pollution at ground level, including through the appropriate location and scale of buildings and trees;*
- 9. Controlling traffic and parking within and around schools, early years sites and other locations that are particularly sensitive to air quality;*
- 10. Promoting actions that help remove pollutants from the air, such as enhancing the green infrastructure network and using innovative building materials that capture air pollutants; and*
- 11. Development should be located in areas that maximise the use of sustainable travel modes and be designed to minimise exposure to high levels of air pollution, particularly for vulnerable users.'*

'Policy JP-C5: Streets for All

Streets will be designed and managed to make a significant positive contribution to the quality of place and support high levels of walking, cycling and public transport. Targeted improvements to the highway network will be supported through studies and scheme development, where they complement the aim of securing a significant increase in the proportion of trips made by walking, cycling and public transport (as set out in Policy JP-C6 'Walking and Cycling' and Policy JP-C3 'Public Transport').

We will seek to ensure:

- 1. The design and management of streets will follow a Streets for All approach, including by:*
 - a. Understanding the 'movement and place function' of streets as the starting point for improvement;*
 - b. Ensuring that streets are welcoming for all, and respond to the needs of those with reduced mobility;*
 - c. Delivering new and improved walking and cycling routes and facilities as part of the delivery of an integrated sustainable transport network;*
 - d. Maximising the ability of pedestrians and cyclists to navigate easily, safely and without*

delay, and minimising barriers and obstacles to their movement;

e. Providing frequent opportunities for people to rest, linger and socialise, and for children to play, particularly in streets with a high 'place function';

f. Setting aside space for cycle parking (including for bike-sharing schemes where appropriate), high-quality public transport waiting areas, and other facilities that will support sustainable modes of travel;

g. Incorporating increased levels of greenery including trees where possible;

h. Offering shelter from wind and rain, and shade from the sun;

i. Delivering priority for public transport and facilities for public transport users;

j. Providing appropriate places and routes for servicing, deliveries and 'drop-off';

k. Mitigating the impacts of air and noise pollution and carbon emissions from road transport;

l. Ensuring the efficient movement of people and goods on streets with a high 'movement function' and;

m. Harnessing new mobility innovations such as traffic signals technology and ULEV charging infrastructure.

2. Improvements to the highways network are part of a multi-modal strategy to increase public transport, cycling and walking and improve access for all;

3. Any new infrastructure minimises the negative effects of vehicle traffic; and

4. New infrastructure includes provision for utilities and digital infrastructure where required.'

7.23 The above policies will be taken into consideration during the undertaking of the assessment.

Local Planning Policy

St Helens

7.24 The St Helens Borough Local Plan up to 2037⁸ was adopted by St Helens Borough Council (SHBC) in July 2022. A review of the document indicated the following policies in relation to air quality that are relevant to this report:

'Policy LPA02: Development Principles

New development in St Helens Borough will be required to support the following development principles where relevant:

⁸ St Helens Borough Local Plan up to 2037, SHBC, 2022.

[...]

5. *Contribute to a high quality built and natural environment by:*

[...]

d) Protecting and enhancing the quality of the Borough's natural resources including water, air, land, and biodiversity;

[...]

7. Promote healthy communities by improving access and opportunities for formal and informal recreation (including through the use of green infrastructure), improving cycling and walking routes, and minimising air, soil, and water pollution.'

'Policy LPA12: Health and Wellbeing

The Council will work with its health and wellbeing partners to promote public health principles, maximise opportunities for people to lead healthy and active lifestyles, and reduce health inequalities for residents within the Borough. Through the planning system, the Council will seek to:

[...]

8. manage air quality and pollution.'

'Policy LPD01: Ensuring Quality Development

All proposals for development will be expected, as appropriate having regard to their scale, location, and nature, to meet or exceed the following requirements:

[...]

2. Environmental Quality

[...]

b) Minimise and mitigate to acceptable levels any effects that the development may have on air quality; light, land and / or water pollution (including contamination of soil, surface water and groundwater resources); and levels of noise, vibration, smells, dust and electromagnetic fields in the area;'

'Policy LPD09: Air Quality

1. Development proposals must demonstrate that they will not:

a) impede the achievement of any objective(s) or measure(s) set out in an Air Quality Management Area (AQMA) Action Plan; or

b) introduce a significant new source of any air pollutant, or new development whose users or

occupiers would be particularly susceptible to air pollution, within an AQMA; or

c) lead to a significant deterioration in local air quality resulting in unacceptable effects on human health, local amenity, or the natural environment, that would require a new AQMA to be created; or

d) having regard to established local and national standards, lead to an unacceptable decline in air quality in any area.

2. Major development schemes should demonstrably promote a shift to the use of sustainable modes of transport to minimise the impact of vehicle emissions on air quality.

3. New development that would result in increased traffic flows on the M62 past Manchester Mosses Special Area of Conservation (SAC) of more than 1000 vehicles per day or 200 Heavy Goods Vehicles (HGVs) per day must be accompanied by evidence identifying whether the resultant impacts on air quality would cause a significant effect on ecological interests within the SAC.

Where such effects are identified they would need to be considered in accordance with Policy LPC06.'

'Policy LPA09: Parkside East

1. The Parkside East site (identified as Site 7EA in Policy LPA03) shall be considered suitable in principle for development of a Strategic Rail Freight Interchange (SRFI) with the primary purpose of facilitating the movement of freight by rail and its on-site storage and transfer between rail and other transport modes.

2. The site is also considered suitable in principle for other forms of B2 and B8 employment use provided that they would:

a) bring significant inward investment, local employment, and training benefits for the local community; and

b) (i) be rail served (i.e., requiring on-site access to a railway); or

(ii) be of a layout and scale that would not prejudice the ability to develop an effectively laid out SRFI or other rail served employment development (including any necessary rail and road infrastructure, buildings, and landscaping), on at least 60ha of the site, at any time in the future.

3. Proposals for development within site 7EA will be required to:

a) satisfy the masterplanning requirements set out in Policy LPA03.1;

b) create safe and convenient access from Junction 22 of the M6 for Heavy Goods Vehicles and other vehicles;

c) mitigate any adverse impacts on the surrounding strategic and local road network;

- d) comply with Policy LPC11 in relation to the protection of designated heritage assets;
- e) achieve direct rail access to and from the Liverpool / Manchester ('Chat Moss') and the West Coast Main Lines (unless agreed otherwise by the Council);
- f) be designed to minimise impacts on residential amenity;
- g) establish and implement a Travel Plan that incorporates measures to encourage travel to / from the development using sustainable transport modes, including access by public transport, cycle and foot, in accordance with Policy LPA07;
- h) make provision for the positive management of existing and new environmental assets;
- i) put training schemes in place (where practicable) to increase the opportunity for the local population to obtain access to employment at the site; and
- j) ensure the timely delivery of the rail terminal infrastructure of the SRFI or other rail served employment development, in accordance with the comprehensive masterplan to be prepared for the whole site as required by Policy LPA03.1, section 2. Within this, details of the phasing for the whole site must include a clear and justified employment floorspace trigger for the delivery of the rail terminal infrastructure.

4. That part of site 7EA which falls to the west of the M6 is safeguarded from all forms of development unless it can be shown that such development within it will not prejudice, or may provide, effective and deliverable future siding facilities in connection with the development of an SRFI or other rail-enabled development within the part of the site which falls to the east of the M6 (see Policies Map).'

7.25 The above policies will be taken into consideration during the undertaking of the assessment.

Wigan

7.26 The Wigan Local Plan Core Strategy⁹ was adopted by Wigan Council (WC) in September 2013. A review of the Wigan Local Plan Core Strategy indicated the following policies relevant to the assessment:

'Objective NRP

[...] ensure that development does not result in unacceptable levels of air pollution or will not have an unacceptable effect on air quality, through traffic emissions [...]

'Policy CP 17 Environmental protection

We will help maintain, enhance and protect our environment for the benefit of people and wildlife, and make the borough a better place for people to live and businesses to locate and thrive by:

⁹ Wigan Local Plan Core Strategy, WC, 2013.

[...]

4. Managing air quality, particularly in our Air Quality Management Areas, including by minimising the air pollution (and carbon dioxide emissions) likely to arise from new development.

[...]

- 7.27 The remaining saved policies within the Wigan Replacement Unitary Development Plan¹⁰ also include a policy with relevance to air quality. This states the following:

'EV1B Pollution

The council will reduce pollution and the effects of pollution by:

Not permitting development which would result in unacceptable levels of air pollution or which would have an unacceptable effect on air quality, particularly in or adjacent to the Air Quality Management Areas declared by the Council under the Environment Act 1995. Sensitive development will not be allowed in areas of unacceptably poor air quality.'

- 7.28 WC adopted the 'Development and Air Quality Supplementary Planning document (SPD)' in April 2021. The document aims to reduce emissions and better manage the air quality impact of all proposed developments through directing development to sustainable locations within easy access to public transport and local services, the application of good design and sustainability principles, and where necessary the implementation of specific and appropriate mitigation measures either on-site or close by.
- 7.29 The above policies, objectives and SPD will be taken into consideration during the undertaking of the assessment.

Warrington

- 7.30 The Warrington Local Plan 2021/22 - 2038/39¹¹ was formally adopted by Warrington Borough Council (WBC) on 4th December 2023 and is the statutory Development Plan for the Borough to 2038/39. Review of the document indicated the following objective and policy of relevance to this report:

'Objective W6: To minimise the impact of development on the environment through the prudent use of resources and ensuring development contributes to reducing carbon emissions, is energy efficient, safe and resilient to climate change and makes a positive contribution to improving Warrington's air quality.'

'Policy ENV8 - Environmental and Amenity Protection

General Principles

¹⁰ Wigan Unitary Development Plan, WC, 2006.

¹¹ Warrington Local Plan 2021/22 - 2038/39, WBC, 2023.

1. *The Council requires that all development is located and designed so as not to result in a harmful or cumulative impact on the natural and built environment, and/or general levels of amenity.*
2. *Development proposals, as appropriate to their nature and scale, should demonstrate that environmental risks have been evaluated and appropriate measures have been taken to minimise the risks of adverse impacts to air, land and water quality, whilst assessing vibration, light and noise pollution both during their construction and in their operation.*

Air Quality

3. *The Council will seek to ensure that proposals for new development will not have an unacceptable negative impact on air quality and will not further exacerbate air quality in the Council's designated Air Quality Management Areas (AQMAs); or will contribute to air pollution in areas which may result in further areas being designated.*
4. *The main allocations (Policies MD1 to MD4) and the smaller settlement allocations, which line the M62 corridor (Policies OS1, OS2 and OS6) must make a proportionate contribution towards restoration measures at Holcroft Moss and devise a scheme-specific range of measures to reduce reliance on cars, reduce trip generation and promote ultra-low emission vehicles. In addition, all other new development that exceeds the thresholds for requiring a Transport Assessment, as specified in the Council's Transport SPD, will be required to consider air quality impacts on the Manchester Mosses Special Area of Conservation (SAC). Any proposals that would result in increased traffic flows on the M62 past the Manchester Mosses SAC of more than 100 vehicles per day or 20 Heavy Goods Vehicles (HGVs) per day must make a proportionate contribution towards restoration measures at Holcroft Moss and devise a scheme-specific range of measures to reduce reliance on cars, reduce trip generation and promote ultra-low emission vehicles.*
5. *Development proposals for sensitive end uses (including but not limited to residential, schools, nurseries, hospitals) are not desirable where they are located in areas of poor air quality including AQMAs, unless a suitable assessment, review and identification of mitigation to lessen the effects on future site users is provided. An air quality assessment will be required where a development may place new sensitive receptors in areas of poor air quality; and/or that may lead to a deterioration in local air quality resulting in unacceptable effects on human health and/or the environment.'*

Guidance

7.31 Guidance documents relevant to the Air Quality Assessment (AQA) is set out in:

- DEFRA (2023) 'The Air Quality Strategy for England, Scotland, Wales and Northern Ireland';
- DEFRA (2023) 'Environmental Improvement Plan 2023';
- DEFRA (2022) 'Local Air Quality Management Review and Assessment Technical Guidance LAQM.TG(22)';

- UK Government (2021) 'Environment Act 2021';
- Environmental Protection UK (EPUK) and IAQM (2017) 'Guidance on Land-use Planning and Development Control: Planning for Air Quality';
- IAQM (2024) 'Guidance on the Assessment of Dust from Demolition and Construction V2.2'; and,
- Natural England (NE) (2018) 'Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations'.

CONSULTATION TO DATE

7.32 A summary of the consultation undertaken to date is shown in Table 7.3.

Table 7.3 Consultation

Consultee	Role	Date of Consultation	Summary
Emma Woodrow, SHBC	Scientific Officer (Air Quality)	26/09/2024	The proposed methodology for the assessment of construction phase fugitive dust emissions and operational and construction phase road vehicle exhaust and rail emissions was provided. No response has been received at the time of writing.
Steve Tesson-Fell Wigan Council	Public Protection Officer	17/10/2024	The proposed methodology for the assessment of construction phase fugitive dust emissions and operational and construction phase road vehicle exhaust and rail emissions was provided. No response has been received at the time of writing.
Angela Sykes Warrington Borough Council	Public Protection and Prevention	14/10/2024	The proposed methodology for the assessment of construction phase fugitive dust emissions and operational and construction phase road vehicle exhaust and rail emissions was provided. No response has been received at the time of writing.

BASELINE CONDITIONS AND MAIN ISSUES

Baseline environment

Local Air Quality Management

7.33 As required by the Environment Act (1995), as amended by the Environment Act (2021), Review and Assessment of air quality has been undertaken by SHBC, WBC and WC. This process has indicated that annual mean concentrations of NO₂ are above the AQO at a number of locations. As such, four Air Quality Management Areas (AQMAs) of relevance to the proposals have been designated. Traffic generated by the Proposed Development has the potential to affect air quality conditions within these sensitive areas. Reference should be made to Figure 7.1 for a map of the AQMA extents.

Air Quality Monitoring

7.34 Monitoring of pollutant concentrations is undertaken by SHBC, WC and WBC throughout their areas of jurisdiction. NO₂ results recorded in the vicinity of the DCO Site are shown in Table 7.4. Exceedances of the annual mean AQO of 40µg/m³ are shown in **bold**.

Table 7.4 Monitoring Results

Monitoring Site		Local Authority	Monitored NO ₂ Concentration (µg/m ³)			
			2019	2020	2021	2022
HS	St Helens High Street	SHBC	31	30	30	27
SR	St Helens Southworth Road	SHBC	43	34	34	37
1	170 Southworth Road	SHBC	24.9	23.2	24.1	18.9
6	Parkside Lampost	SHBC	21.5	17.3	20.9	17.7
7, 10 31	160 Southworth Road	SHBC	31.4	31.5	36.5	27.8
8	157 High Street	SHBC	23.0	19.8	23.4	20.3
11	Southworth Road LP 11	SHBC	34.0	31.7	35.1	28.9

Monitoring Site		Local Authority	Monitored NO ₂ Concentration (µg/m ³)			
			2019	2020	2021	2022
14, 23	19 High Street	SHBC	30.7	28.0	34.4	25.5
25, 32	High Street Monitor	SHBC	30.0	24.7	31.2	26.0
15	2 Parkside Cottages	SHBC	27.1	25.9	26.6	23.2
DT6	WA37 Elm Road ^(a)	WBC	-	23.9	28.4	24.5
WI167NO	Newton Road	WC	26.3	18.7	20.6	19.2
WI168NO	Newton Road	WC	35.7	24.8	25.4	25.0
WI169NO	East Lancashire Road	WC	32.7	23.9	26.1	24.1
WI205NO	Newton Road ^(a)	WC	-	22.4	23.0	22.9
WI170NO	Newton Road	WC	28.5	21.4	22.7	21.4
WI180NO	4 Winwick Lane	WC	57.9	41.9	44.6	45.3
WI188NO	Winwick Lane	WC	38.3	27.9	30.6	30.7
WI189NO	Newton Road	WC	35.1	22.0	25.3	21.9
W206NO	Winwick Lane ^(a)	WC	-	20.4	22.6	20.7
W207NO	Winwick Lane ^(a)	WC	-	24.7	27.3	23.2

Monitoring Site		Local Authority	Monitored NO ₂ Concentration (µg/m ³)			
			2019	2020	2021	2022
W214NO	Newton Road ^(b)	WC	-	-	17.1	17.0
W215NO	Newton Road ^(b)	WC	-	-	19.0	17.7
W213NO	Newton Road ^(b)	WC	-	-	17.1	16.0
WI52NO	Church Lane	WC	23.7	16.8	18.9	17.9
W199NO	Church Street ^(a)	WC	-	21.3	23.1	22.8
WI226NO	Charles Street ^(b)	WC	-	-	20.8	20.3
WI227NO	Church Street ^(b)	WC	-	-	25.1	23.9
WI228NO	Church Street ^(b)	WC	-	-	21.6	22.4
WI225NO	Charles Street ^(b)	WC	-	-	19.9	20.5
WI229NO	Heath Street ^(b)	WC	-	-	22.8	21.1
WI221NO	Tanner's Lane ^(b)	WC	-	-	20.9	21.8
WI222NO	Tanner's Lane ^(b)	WC	-	-	22.1	24.9
WI223NO	High Street ^(b)	WC	-	-	20.7	22.4
WI224NO	High Street ^(b)	WC	-	-	29.6	30.3
WI230NO	Heath Street ^(b)	WC	-	-	27.1	29.1

Monitoring Site		Local Authority	Monitored NO ₂ Concentration (µg/m ³)			
			2019	2020	2021	2022
WI242NO	Slag Lane ^(c)	WC	-	-	-	17.1
WI243NO	Slag Lane ^(c)	WC	-	-	-	17.9

Notes: (a) Monitor commissioned in 2020.

(b) Monitor commissioned in 2021.

(c) Monitor commissioned in 2022.

7.35 As shown in Table 7.4, annual mean NO₂ concentrations were above the AQO of 40µg/m³ at SR - St Helens Southworth Road in 2019 and WI180NO - Winwick Lane in recent years. The SR - St Helens Southworth Road monitor is located at a roadside position within an AQMA. The WI180NO - Winwick Lane monitor is located on a building façade approximately 2m from the kerb of the nearest road. As such, elevated levels would be expected at these locations. Levels were below the AQO at all remaining monitors in recent years. Reference should be made to Figure 7.1 for a map of the survey positions.

7.36 Pollutant concentrations during 2020 and 2021 were affected by changes to travel patterns associated with the COVID-19 pandemic. The results should therefore be viewed with caution. However, data for 2022 is now considered representative of post-pandemic conditions. This is supported by the IAQM¹², who have adopted the following position:

'ambient air quality monitoring data for the year 2022 and beyond is generally considered to represent the current post-pandemic baseline.'

7.37 Monitoring of PM₁₀ and PM_{2.5} concentrations is not undertaken within the vicinity of the DCO Site.

Background Pollutant Concentrations

7.38 Predictions of background pollutant concentrations on a 1km by 1km grid basis have been produced by DEFRA to assist Local Authorities in their review and assessment of air quality. The DCO Site is partly located in four grid squares. Data for these locations was downloaded from the DEFRA website¹³ for the purpose of the assessment and is summarised in Table 7.5.

¹² Use of 2020 and 2021 Monitoring Datasets - IAQM Position Statement V1.1, IAQM, 2023.

¹³ <http://uk-air.defra.gov.uk/data/iaqm-background-maps?year=2018>.

Table 7.5 Background Pollutant Concentration Predictions

National Grid Reference (NGR) (m)	Predicted 2024 Background Pollutant Concentration ($\mu\text{g}/\text{m}^3$)		
	NO ₂	PM ₁₀	PM _{2.5}
360500, 394500	13.25	13.14	7.92
360500, 395500	13.33	13.39	8.01
361500, 394500	12.71	14.02	8.07
361500, 395500	10.59	12.42	7.34

7.39 As shown in Table 7.5, predicted background NO₂ and PM₁₀ concentrations are below the AQO of 40 $\mu\text{g}/\text{m}^3$ and PM_{2.5} levels below the Interim Target of 12 $\mu\text{g}/\text{m}^3$ at the DCO Site.

Sensitive Receptors

7.40 There are a number of residential properties within the vicinity of the DCO Site which may be affected by fugitive dust emissions during construction of the development. Additionally, there are a number of residential properties within the vicinity of roads which may be affected by changes in traffic flow and associated increases in vehicle exhaust emissions as a result of the operation of the Proposed Development. The closest of these is a group of four bungalows located within 30m north of the DCO Site boundary along Parkside Road and dwellings along Winwick Lane, approximately 30m south of the DCO Site boundary. The exact receptors for consideration within the EIA will be determined following review of the finalised DCO Site layout and traffic data. This will ensure all relevant sensitive locations are considered.

7.41 Road vehicle exhaust emissions have the potential to cause air quality impacts at sensitive ecological designations within 200m of any road affected by increases in Proposed Development related traffic flow, whilst construction dust emissions may affect habitats within the Highfield Moss Site of Special Scientific Interest (SSSI) adjacent to the DCO Site boundary. Manchester Mosses Special Area of Conservation (SAC) is also located approximately 6.5km south-east and 7.3km east of the DCO Site and may be affected by off-site emissions. Measures will be developed to manage construction activities, with particular regard to Highfield Moss SSSI.

Proposed approach to surveys and further baseline data collection

7.42 Due to the detailed information available to inform the baseline study, it is not proposed to undertake further air quality monitoring within the vicinity of the DCO Site. This position will be reviewed as the design of the Proposed Development progresses, with particular

consideration to potential off-site highways works.

APPROACH AND METHODOLOGY

7.43 It is proposed to include assessment of the following issues within the EIA.

Construction Phase Fugitive Dust Emissions

7.44 Potential air quality impacts as a result of fugitive dust emissions from earthworks, construction and trackout activities will be assessed in accordance with the IAQM guidance 'Assessment of Dust from Demolition and Construction V2.2'¹⁴.

7.45 The potential for dust emissions will be assessed for each activity that is likely to take place and will consider three separate dust effects:

- annoyance due to dust soiling;
- harm to ecological receptors; and
- the risk of health effects due to a significant increase in exposure to PM₁₀.

7.46 The significance of potential effects throughout construction will be defined based on the IAQM guidance¹⁵.

Construction and Operational Phase Road Vehicle Exhaust Emissions

Human Receptors

7.47 The Proposed Development has the potential to impact on existing air quality as a result of road traffic exhaust emissions, such as NO₂, PM₁₀ and PM_{2.5}, associated with vehicles travelling to and from the DCO Site. These will be assessed through detailed dispersion modelling using ADMS-Roads in order to quantify pollution levels at sensitive locations for the following scenarios:

- Baseline;
- Future Baseline (Future Year Do-Minimum (DM)) (predicted baseline traffic flows without the Proposed Development in place during the proposed opening year of ILPN RFI); and
- Future Baseline with the Proposed Development (Future Year Do-Something (DS)) (predicted traffic flows with the Proposed Development in place during the opening year of ILPN RFI).

7.48 A review of the receptors selected for the Parkside Link Road (SHBC ref. P/2018/0249 and WBC ref. 2018/32514) and Parkside West Phase I (SHBC ref. P/2018/0048/OUP) and Parkside

¹⁴ Assessment of Dust from Demolition and Construction V2.2, IAQM, 2024.

¹⁵ Assessment of Dust from Demolition and Construction V2.2, IAQM, 2024.

West Phase II (SHBC ref. P/2024/0419/HYEIA) applications will be undertaken as the starting point for the selection of assessment locations for ILP North.

- 7.49 The significance of potential impacts will be determined based on the predicted magnitude of change in pollutant concentrations and the criteria provided within the IAQM document 'Land-Use Planning & Development Control: Planning for Air Quality'¹⁶, as outlined in Table 7.6.

Table 7.6 Significance of Operational Phase Road Vehicle Exhaust Emission Impact

Concentration at Receptor in Assessment Year	Predicted Concentration Change as Proportion of AQO/Interim Target (µg/m³)			
	1	2 - 5	6 - 10	> 10
75% or less of AQO/Interim Target	Negligible	Negligible	Slight	Moderate
76 - 94% of AQO/Interim Target	Negligible	Slight	Moderate	Moderate
95 - 102% of AQO/Interim Target	Slight	Moderate	Moderate	Substantial
103 - 109% of AQO/Interim Target	Moderate	Moderate	Substantial	Substantial
110% or more of AQO/Interim Target	Moderate	Substantial	Substantial	Substantial

- 7.50 It should be noted that changes of 0%, i.e. less than 0.5%, will be described as negligible in accordance with the IAQM guidance¹⁷.

- 7.51 It should be noted that the determination of significance relies on professional judgement and reasoning should be provided as far as practicable. This will be considered throughout assessment when defining predicted effects.

Ecological Receptors

- 7.52 During the operation of the Proposed Development there is also the potential for air quality impacts at ecological receptors as a result of road traffic exhaust emissions associated with vehicles travelling to and from the DCO Site. NE has produced 'Natural England's approach to advising competent authorities on the assessment of road traffic exhaust emissions under the

¹⁶ Land-Use Planning & Development Control: Planning for Air Quality, IAQM, 2017.

¹⁷ Land-Use Planning & Development Control: Planning for Air Quality, IAQM, 2017.

Habitats Regulations¹⁸ which describes how competent authorities and others assess plans and projects likely to generate road traffic emissions and subsequently affect ecological designations. This provides a staged assessment methodology to provide consideration of potential air quality impacts from a development both alone and in-combination.

- 7.53 The initial phase of the assessment will be to screen the predicted changes in traffic flow against the criteria outlined by NE. Should this indicate impacts can be classified as not significant then this would be summarised in the chapter. If effects cannot be screened, then dispersion modelling would be undertaken in order to further assess potential effects. The results would be discussed with the Ecologist for ILP North in order to determine the significance of effect and any requirement for mitigation.

Operational Phase Rail Emissions Assessment

- 7.54 The scheme comprises a Strategic Rail Freight Interchange (SRFI). Diesel locomotives are a source of atmospheric emissions and research has shown that pollutant concentrations can be elevated alongside rail lines with a large number of movements. A screening assessment will therefore be undertaken in accordance with DEFRA guidance¹⁹ in order to evaluate the potential for poor air quality at sensitive locations due to rail emissions from the Proposed Development. Any sensitive receptors identified will be within 30m of the railway line. It should be noted that modern diesel engine technology is a less significant source of emissions compared to older stock and electric trains do not emit emissions to atmosphere.
- 7.55 Should screening of the relevant data indicate potential for exceedences of the relevant AQOs at sensitive locations in the vicinity of the DCO Site, then detailed dispersion modelling will be undertaken in order to quantify pollution levels at sensitive locations both with and without the development in place. The significance of effect would be determined using the approach previously outlined for road vehicle exhaust emissions.

Operational Phase Combustion Emissions

- 7.56 Any combustion plant (back up CHP) included in the Proposed Development has the potential to cause air quality impacts within the vicinity of the DCO Site. Dependant on the scale, these may require assessment using dispersion modelling to quantify changes in pollution levels at receptor positions with the results included in an AQA. The exact assessment methodology would be determined based on the specification of any plant to be included in the Proposed Development.

PRELIMINARY ASSESSMENT OF POTENTIAL EFFECTS

- 7.57 During the construction phase of the Proposed Development there is the potential for fugitive dust emissions. Mitigation measures will be identified in accordance with the IAQM guidance²⁰ for incorporation into the Construction Environmental Management Plan (CEMP).

¹⁸ Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations, NE, 2018.

¹⁹ Local Air Quality Management Review and Assessment Technical Guidance LAQM.TG(22), DEFRA, 2022.

²⁰ Assessment of Dust from Demolition and Construction V2.2, IAQM, 2024.

Experience has shown that these are likely to control residual effects to an acceptable level.

- 7.58 It is not possible at the time of this Scoping Report to determine the potential effects as a result of the operational phase of the Proposed Development as traffic generation and rail movement data is not yet available.

PROPOSED AVOIDANCE AND MITIGATION MEASURES

- 7.59 As previously discussed, due to the size and nature of the Proposed Development, a CEMP will be produced to control air quality and other environmental effects during the construction phase. Site-specific measures will be identified in accordance with the IAQM guidance²¹ to mitigate fugitive dust emissions during construction as part of the AQA.
- 7.60 If required, mitigation measures associated with road vehicle exhaust emissions during the construction and operational phases, such as Travel Planning and Active Travel Initiatives, will be identified in order to reduce air quality effects to an appropriate level with reference to the recommendations included within the IAQM guidance²².

UNCERTAINTIES

- 7.61 There will be a number of assumptions and uncertainties during the assessment, particularly in terms of model inputs. These include the following:
- The meteorological data for use in the assessment will be taken from Manchester Airport, which is considered to be representative of the conditions at the DCO Site. This was determined based on a review of available observation locations to ensure the most representative record station was selected, this is in line with the approach taken for the consideration of the Parkside West planning applications;
 - Background pollutant concentrations for use in the assessment are considered to be representative of baseline annual mean pollutant concentrations at the DCO Site. These values will be obtained from the DEFRA background mapping study, an industry standard database produced on behalf of the UK Government, to ensure the most accurate representation of background pollutant concentrations;
 - The traffic data for the purpose of the assessment will be provided by Hydrock, the Transport Consultants for the ILPN SRFI, and are therefore considered suitable for an assessment of this nature; and,
 - The monitoring data for use in the assessment will be obtained from SHBC, WC and WBC at the time of assessment. These are reported in accordance with DEFRA requirements and are therefore considered reliable.
- 7.62 The above assumptions are similar to those required for any development of this nature and the adoption of worst-case parameters, where necessary, will ensure the assessment results

²¹ Assessment of Dust from Demolition and Construction V2.2, IAQM, 2024.

²² Land-Use Planning & Development Control: Planning for Air Quality, IAQM, 2017.

can be considered robust.

SUMMARY OF PROPOSED EIA SCOPE

7.63 The proposed scope to be reported in the ES is provided in Table 7.7.

Table 7.7 Summary of Air Quality impacts proposed to be scoped in and out of the EIA

Impacts	Scoped in or out?	Justification
Construction		
Dust generated by construction activities	In	During the construction of the Proposed Development there is the potential for air quality impacts as a result of fugitive dust emissions from earthworks, construction and trackout activities
Road vehicle exhaust emissions generated by vehicles travelling to and from the Proposed Development	In	During the construction of the Proposed Development there is the potential for air quality impacts as a result of road traffic exhaust emissions associated with vehicles travelling to and from the DCO Site
Operation		
Road vehicle exhaust emissions generated by vehicles travelling to and from the Proposed Development	In	During the operation of the Proposed Development there is the potential for air quality impacts as a result of road traffic exhaust emissions associated with vehicles travelling to and from the DCO Site
Rail emissions as a result of an increase of locomotive movements on the rail network	In	The introduction of the SRFI may increase locomotive movements on the rail network. Associated emissions have the potential to

Impacts	Scoped in or out?	Justification
		cause impacts at human and ecological receptors within the vicinity of the relevant lines
Air quality impacts as a result of combustion plant	In	Any CHP plant included in the Proposed Development has the potential to cause air quality impacts within the vicinity of the DCO Site

Chapter 8 ◆ Noise and vibration

INTRODUCTION

- 8.1 This chapter outlines the proposed approach to the assessment of the likely significant effects arising from the Proposed Development, as described in Chapter 3, with respect to noise and vibration.
- 8.2 It introduces the receptors of relevance to the assessment, the approach to the collection of baseline data and the assessment of the impacts of the Proposed Development during construction and operation.
- 8.3 The following aspects have been considered as part of the scope and methodology for the noise and vibration assessment:
- construction and demolition noise and vibration from the DCO Site as well as any offsite highway works;
 - changes in road traffic noise on the surrounding road network;
 - noise from operational activities at the Proposed Development; and
 - changes in railway noise and vibration from additional freight trains serving the Strategic Rail Freight Interchange (SRFI) both on the mainline railways and within the DCO Site.
- 8.4 In line with the EIA Regulations, this Scoping Report chapter has been compiled by appropriately qualified, experienced, and competent experts. The noise and vibration assessment will be undertaken by Vanguardia. Vanguardia has extensive experience in characterising the baseline conditions, predicting and assessing the noise and vibration impacts and effects from a range of developments including residential, mixed use, commercial, industrial developments as well as high profile entertainment venues. Our team has worked in both the public and private sector, provided and continue to provide technical advice to Working Groups, Government Departments and have provided evidence to Parliament on matters relating to noise. They are recognised within the industry as having extensive experience in the field of acoustics. Vanguardia's lead acoustician for the Intermodal Logistics Park North Rail Freight Interchange (ILPN RFI) has 15 years' experience of managing EIA projects including those for Nationally Significant Infrastructure Projects and Rail Freight Interchanges.

RELEVANT LAW, POLICY AND GUIDANCE

8.5 The DCO will be assessed against the Infrastructure Planning (Decisions) Regulations 2010 and National Networks National Policy Statement ('NPSNN', adopted 2024). The National Planning Policy Framework ('NPPF', 2023) and relevant local planning policy are material considerations.

National Policy

8.6 For nationally significant road, rail and strategic rail freight infrastructure projects (as defined in the Planning Act 2008), the National Policy Statement for National Networks (NPSNN)ⁱ sets out the relevant policy objectives.

8.7 The noise and vibration section of the NPSNN (paragraphs 5.227 to 5.242) identifies the factors that will determine the likely noise and vibration impact, the requirements of the noise assessment, relevant prediction methodologies, mitigation of identified effects and decision-making criteria. It also states that *'in line with current legislation all references to "noise" apply equally to the assessment of impacts of vibration'*.

8.8 It also advises at paragraph 5.238 that *'Applicants should consider opportunities to address noise issues associated with Important Areas as identified through the noise action planning process.'*

8.9 Paragraph 5.239 of the NPSNN states that when making a decision about the development proposals, due regard should be given to the Noise Policy Statement for Englandⁱⁱ (NPSE), the National Planning Policy Frameworkⁱⁱⁱ (NPPF) and the Government's associated National Planning Practice Guidance on Noise^{iv} (NPPG(N)). The advice in paragraph 5.241 of the document indicates that development consent should not be granted unless the development meets the following aims, within the context of government policy on sustainable development:

- *'avoid¹ significant adverse impacts on health and quality of life from noise as a result of the new development;*
- *mitigate and minimise other adverse impacts on health and quality of life from noise from the new development; and*
- *contribute to improvements to health and quality of life through the effective management and control of noise, where possible.'*

8.10 Regarding significant adverse effects, the NPPG(N) indicates that where increasing noise exposure causes the significant observed adverse effect level (SOAEL) threshold to be crossed,

¹ "Avoid" here does not mean a significant adverse effect cannot ever exist. Instead, it means make every effort so that significant adverse impacts do not occur. The hierarchy set out in the PPG(N) confirms this to be the case. The reason is that the NPSE covers all sources and for historical legal reasons, there are certain circumstances (e.g. statutory nuisance legislation) where a significant adverse impact is lawfully allowed to occur.

there are two levels of adverse effect:

- A significant adverse effect – in line with policy, every effort should be made to avoid these effects through mitigation, but there are some circumstances in which they can occur. Decisions must take account of the economic and social benefit of the activity causing or being affected by the noise.
- An unacceptable adverse effect – the impacts on health and quality of life are such that these effects should be prevented from occurring, regardless of the benefits of the activity causing the noise.

Local Policy

8.11 The local policy which is applicable and the policies of potential relevance to the noise and vibration assessment are set out below. The draft Order limits are within St Helens Borough Council and Wigan Council administrative areas. Warrington Borough Council is located adjacent to the DCO Site, but there are sensitive receptors within the borough that may be affected by the Proposed Development.

St Helens Borough Council

St Helens Borough Local Plan up to 2037

8.12 The relevant Statutory Development Plan is the St Helens Borough Local Plan up to 2037 (published in July 2022). The policies of relevance to noise and vibration from the Proposed Development are:

- Policy LPA06: Transport and Travel.
- Policy LPA09: Parkside East.
- Policy LPA10: Parkside West.
- Policy LPD01: Ensuring Quality Development.

Wigan Council

Greater Manchester Places for Everyone, 2024

8.13 The Greater Manchester Places for Everyone 2024 is a joint development plan of nine Greater Manchester districts (Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Tameside, Trafford and Wigan). The relevant policies in respect of noise and vibration are:

- Policy JP-C5: Streets for All.
- Policy JP-C8: Transport Requirements of New Development.

Wigan Local Plan Core Strategy 2013

8.14 The Wigan Local Plan Core Strategy 2013 has been partially superseded by the Greater Manchester Places for Everyone Plan, however saved Policy CP17 Environmental Protection still remains relevant to the Proposed Development.

Wigan Unitary Development Plan 2006

8.15 The Wigan Unitary Development Plan 2006 has also been partially superseded by the Greater Manchester Places for Everyone Plan, however saved policy EV1B Pollution is considered relevant to the noise and vibration assessment.

Warrington Borough Council

8.16 The Proposed Development has the potential to affect sensitive receptors within the jurisdiction of Warrington Borough Council. The relevant local policy is set out below;

Warrington Local Plan, 2023

- Policy ENV8 - Environmental and Amenity Protection.

8.17 In addition to the above local policy, any applicable Supplementary Planning Guidance or Documents produced by the Local Authorities will be taken into consideration where relevant to the Proposed Development and its potential noise and vibration effects.

Legislation

8.18 The most relevant legislation in the context of the noise and vibration assessment is listed below:

- the Noise Insulation Regulations, 1975 (as amended 1988);
- the Noise Insulation (Railways and Other Guided Transport Systems) Regulations, 1996.

Other relevant guidance

8.19 In addition, the assessment will take into consideration a number of British Standards and other guidance documents. These include:

- Association of Noise Consultants (ANC) Guidelines: Guidelines: Measurement & Assessment of Groundborne Noise & Vibration (ANC Guidelines), 2020;
- Calculation of Road Traffic Noise (CRTN), 1988;
- Calculation of Railway Noise (CRN), 1995;
- Design Manual for Roads and Bridges (DMRB), LA111 Noise and Vibration May 2020 Revision 2;
- Defra Additional Railway Noise Source Terms for 'Calculation of Rail Noise 1995';

- BS 4142:2014+A1:2019 Method for rating and assessing industrial and commercial sound;
- BS 5228:2009+A1:2014 (Parts 1 and 2) Code of Practice for Noise and Vibration Control Construction and Open Sites;
- BS 8233:2014 Guidance on sound insulation and noise reduction for buildings;
- BS 6472-1:2008 Guide to evaluation of human exposure to vibration in buildings. Vibration sources other than blasting;
- ISO 9613-2:2024 Acoustics – Attenuation of sound during propagation outdoors Part 2: Engineering method for the prediction of sound pressure levels outdoors ;
- World Health Organisation, Guidelines for Community Noise (1999);
- IEMA Guidelines for Environmental Noise Impact Assessment (2014).

CONSULTATION TO DATE

- 8.20 A meeting was held between Vanguardia and St Helens Council’s Scientific Officer for Noise and their Team Leader on the 6th August 2024. During the meeting, a brief introduction to ILPN RFI and overview of the DCO process was given. An outline of the anticipated scope of the noise and vibration assessment was also discussed. This was then followed by a discussion of the approach that would be undertaken for the baseline noise and vibration surveys.
- 8.21 Following this meeting, the indicative baseline survey locations (discussed further below from paragraph 8.32 onwards) and an overview of the measurement methodology was sent by email to the officers. A response was received from the Scientific Officer for Noise on 21st August 2024 indicating that they had reviewed the documents and were in agreement with the survey proposals and that they represented all relevant receptors.
- 8.22 Further discussions with other host and affected local authority offices will be sought as ILPN RFI progresses, and as effects of the Proposed Development are identified and feedback is received through the scoping process.

BASELINE CONDITIONS AND MAIN ISSUES

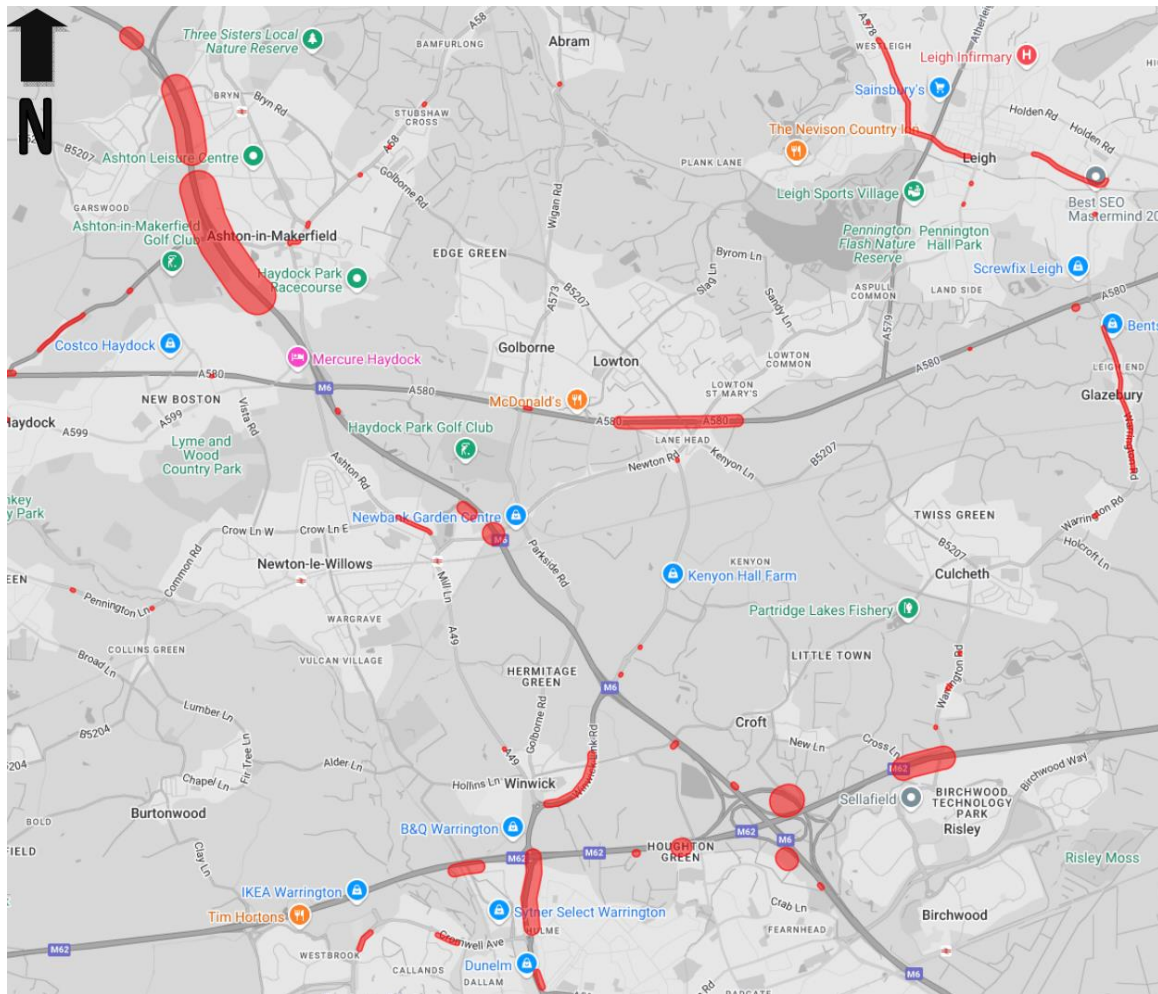
Baseline environment

- 8.23 The existing noise environment in the area and at the nearby sensitive receptors is affected by road and rail traffic from the M6, M62, A49, A572, the A580, Newton Road, Parkside Road, Kenyon Lane, Winwick Lane, the West Coast Mainline and the Chat Moss Line. There will also be some contribution from the Kenyon Hall Airfield (when the air strip is in use).
- 8.24 The Highfield Moss Site of Special Scientific Interest (SSSI) is located directly adjacent to the DCO Site boundary. The SSSI is bounded to the north by the Chat Moss Line and to the south/south-west by the Kenyon Hall Airfield . It is understood that the site is designated

primarily for the habitat and flora which are present as opposed to the fauna, although there are understood to be rabbits as well as breeding and wintering bird populations. At the time of writing, the ecologist for ILPN RFI has not identified any species which are particularly sensitive to noise.

- 8.25 It is also noted that the Parkside Link Road (as described in Chapter 2: The Site) is currently under construction and that these construction works will generate noise during the daytime period which may have been captured in the baseline noise survey.
- 8.26 The Parkside Link Road is expected to be fully completed prior to the start of any construction works associated with the Proposed Development, although a new access point for the DCO Site will need to be provided. The Parkside West Scheme will be constructed over a longer period and therefore it is likely there would be some overlap between the construction phases of Parkside West and ILPN RFI. .
- 8.27 The NPSNN states that *'Applicants should consider opportunities to address noise issues associated with Important Areas as identified through the noise action planning process'*. The Important Areas (IAs) for roads and railways are based on strategic noise mapping results. They highlight "hotspot" locations where the highest 1% of noise levels at residential locations can be found and provide a framework for further investigation. There are a number of Important Areas (IAs) in the vicinity of the Proposed Development as shown in Figure 8.1. Opportunities to address these will be considered where appropriate as the Proposed Development progresses.

Figure 8.1 Noise Important Areas



8.28 Regarding vibration, the existing sources of vibration are primarily the two rail lines: the Chat Moss Line which runs east to west and the West Coast Mainline which runs north to south. Both lines are currently utilised by passenger trains and freight trains.

Future baseline environment

8.29 In the absence of the Proposed Development, the future noise and vibration environment is likely to continue to be governed by changes in the current dominant sources of noise and vibration at the sensitive receptors, which are predominantly road and rail traffic. Some receptors will also be affected by noise arising from the Parkside West Phase I and II schemes.

8.30 The change in the baseline road traffic conditions (including the effect of the Parkside Link Road) would be determined through a review of the change in road traffic forecasts for the future baseline assessment years and the contribution from committed developments. This would be factored into the traffic flows provided for the future baseline assessment years.

8.31 With regard to rail traffic, the likely future changes in rail traffic will be taken into account in the future baseline assessment year forecasts, as far as practicable.

Proposed approach to surveys and further baseline data collection

- 8.32 Noise and vibration surveys have been undertaken to characterise and quantify the existing baseline noise and vibration environment in the areas immediately surrounding the DCO Site. These commenced on 9th September 2024 and ended on 24th September 2024 for all locations, except one (LT5) which experienced a power failure and was redeployed between the 24th September and 8th October 2024.
- 8.33 The surveys were conducted following the principles set out in BS 7445-2:1991 and BS 4142:2014+A1:2019. They comprised measurements at locations considered to represent the closest noise sensitive receptors (as discussed below at paragraphs 8.42 to 8.47). It is not practicable to undertake baseline monitoring at every sensitive receptor; therefore, monitoring locations are selected which represent a cluster of receptors with the same or very similar level of exposure.
- 8.34 For vibration, it is proposed to undertake some attended sample measurements following the principles of BS 6472-1:2008 at the closest receptors to the existing rail lines to determine the existing levels of vibration from passing passenger and freight trains at the receptor locations. In combination with train timetable information, this will allow the existing vibration exposure to be determined.
- 8.35 The indicative monitoring positions for the baseline surveys are shown in Figure 8.2 and 8.3). Positions denoted with 'LT' indicate unattended noise survey locations (long-term) where monitoring will generally be undertaken over a period of at least one week (including a weekend). There are currently 12 long term locations. Those with an 'ST' indicate short-term attended survey locations which will be correlated with the long-term positions. These measurements will typically generally comprise three 15 minute samples during the daytime and night-time period which can then be compared to the corresponding data at the nearest long-term positions. Those denoted with a 'V' indicate vibration measurements will be undertaken at these locations.
- 8.36 Prior to the commencement of the survey work, the intended monitoring positions, methodology and duration of monitoring was agreed with St Helens Borough Council (SHBC). Depending on access, the availability of suitable locations to secure the monitoring equipment, and the variability of the noise and vibration climate, the positions may be altered or rationalised as the survey progresses. A weather station will also be installed at one location for the duration of the noise surveys.
- 8.37 Contact was not made with Wigan Council prior to undertaking the baseline surveys but will be made as soon as possible to explain the approach to the surveys. Any necessary changes will be discussed and agreed with SHBC and Wigan, taking into account their feedback. Furthermore, contact will also be made with representatives from Warrington Borough Council to discuss the approach to the baseline surveys and identify any additional locations or areas which require further consideration.
- 8.38 As the Proposed Development progresses, a methodology for any additional baseline survey work associated with any highway works or highway mitigation will be developed and

discussed with the relevant Council officers..

APPROACH AND METHODOLOGY

- 8.39 The Proposed Development is anticipated to generate noise and vibration during the construction and operational phases of the development from a number of different sources, including;
- construction and demolition noise and vibration from the DCO Site as well as any offsite highway works;
 - changes in road traffic noise on the surrounding road network;
 - noise from operational activities at the Proposed Development;
 - changes in railway noise and vibration from additional freight trains serving the SRFI both on the mainline railways and within the DCO Site.
- 8.40 The noise levels from each source will be predicted using 3D noise modelling software which takes into account the topography of the DCO Site, surrounding highway network and receptors as well as the relevant prediction methodologies for each source.
- 8.41 The assumptions made for each element of the predictions and subsequent assessment will be clearly stated in the supporting technical appendixes to the PEIR and ES Chapter.

Receptors

- 8.42 The assessment of noise and vibration effects is receptor led, i.e., it is based on consideration of a sample of sensitive receptors most exposed to the relevant sources of noise and vibration. As the effects of noise and vibration typically reduce with distance from the source, this provides a robust basis for the assessment. Furthermore, it is not practicable to undertake an assessment at every individual receptor and therefore as is standard practice, a sample of receptors will be selected for the assessment based on them being representative of other receptors in the same area and reflecting the worst case (i.e. those which are most exposed to noise from the development).
- 8.43 The main sensitive receptors likely to be affected by the Proposed Development are those residential properties or natural (ecological) features close to the DCO Site, as well as receptors close to the roads along which the development traffic will travel or in proximity to any proposed highway works. The specific receptor locations and the sources of noise which will be assessed at each receptor will be identified in due course. The impacts at other receptors located at a greater distance from the DCO Site or any highway works will be lower than at the receptors considered in the assessment.
- 8.44 It is anticipated that the nearest sensitive receptors to the DCO Site are residential dwellings located along:
- Southworth Road/Newton Road (A572) north of the DCO Site.

- Winwick Lane (A579) east of the DCO Site.
- Parkside Road (A573) both those located north of the Chat Moss Line on the east of the M6 and those to the west of the M6 as the road travels towards Hermitage Green.
- Mill Lane/Winwick Road (A49) – due to potential effects from traffic and the Western Rail Chord.
- Banastre Drive and Rosemary Drive - due to potential effects from rail noise and vibration.
- Hermitage Green Lane – due to potential noise effects from the Western Rail Chord and link road.

8.45 This list is not exhaustive - specific receptor locations will be identified as the assessment progresses and agreed with SHBC, Wigan Council and Warrington Borough Council .

8.46 Ecological receptors at the Highfield Moss SSSI will be considered - suitable information will be provided to the ecologist for the Proposed Development to inform their assessment of the potential effects on ecological receptors.

8.47 The Huskisson Memorial, which is Grade II listed, is not considered as a sensitive receptor as there is no current public access.

Study Area

8.48 As discussed above, the noise and vibration assessment will be a receptor led approach, focusing on the most affected receptors. The specific receptor locations will be identified as the assessment progresses.

8.49 However, with regard to the study area, there are some distance related criteria for certain impacts and effects which will be taken into account. These are discussed below.

- Construction vibration – DMRB indicates a study area of 100 m from the closest construction activity with the potential to generate vibration is normally sufficient.
- Operational vibration – as per the construction vibration assessment, the study area will be limited to receptors within 100 m of the rail line. The longitudinal extent of the study area along the line will be identified once further information is available regarding acceleration and deceleration distances.
- Construction noise from highway works – DMRB indicates a study area of 300 m from the closest construction activity is normally sufficient.
- Operational noise from highway works – DMRB indicates this should be considered within 600 m of new road links or links physically changed or bypassed by the Proposed Development and within 50 m of other road links with the potential to experience a change in the basic noise level (BNL) of more than 1.0 dB(A) as a result of the Proposed Development.

- Operational noise from additional movements on mainline rail network – the Noise Insulation (Railways and Other Guided Transport Systems) Regulations 1996 indicate a distance of 300m from the nearest running rail.

Approach and Significance Criteria

8.50 In general, the approach to the assessment used for each type of noise or vibration source is different in terms of how the potential noise or vibration impact is predicted and how the effects are assessed. The noise and vibration assessment adopts a different approach to determining effect significance than the matrix style presented in Chapter 4: Approach to the Assessment. The rationale behind this is explained below.

8.51 The implementation of government policy on noise primarily requires the determination of whether the impact is likely to cause a significant adverse effect or an adverse effect. The corresponding thresholds for these are defined as the SOAEL (Significant Observed Adverse Effect Level) and the LOAEL (Lowest Observed Adverse Effect Level). Whilst the term ‘level’ is used, the definition of these thresholds can take account of not only the noise level, but the number of times it occurs, when it occurs and the sensitivity of the receptor experiencing the noise impact.

8.52 Consequently, as stated in the Noise Policy Statement for England (NPSE) in relation to the SOAEL:

‘It is not possible to have a single objective noise-based measure that defines SOAEL that is applicable to all sources of noise in all situations. Consequently, the SOAEL is likely to be different for different noise sources, for different receptors and at different times.’

8.53 Therefore, the thresholds for LOAEL and SOAEL are set by the assessor, based on prevailing evidence regarding the impact of that source on the relevant receptors. They might reflect what has been used elsewhere, but should not be used simply because they have been used elsewhere – a tailored approach is required.

8.54 Across the various government policy documents, the requirements relating to mitigation are the same:

- impacts above SOAEL are to be avoided in the context of government policy on sustainable development.
- impacts above LOAEL but below SOAEL are to be mitigated and reduced to a minimum again, in the context of government policy on sustainable development.

8.55 For impacts between LOAEL and SOAEL, the NPSE explains that:

‘all reasonable steps should be taken to mitigate and minimise adverse effects on health and quality of life while also taking into account the guiding principles of sustainable development. This does not mean that such adverse effects cannot occur.’

8.56 The magnitude of the impact and the significance of the effect is dependent upon several

factors, including:

- the existing sound environment and how it is likely to evolve in the absence of the Proposed Development;
- the noise level generated from the particular activity, (i.e. the exposure level with the Proposed Development);
- the change from the baseline (existing sound environment) or future baseline in the absence of the Proposed Development (as a result of the new noise source);
- the duration, timing and character of the different noise sources;
- in some situations, the number of dwellings affected can form part of the assessment of significance.

8.57 Therefore, in any situation, whether or not a significant adverse effect is occurring depends on a number of factors, not just a combination of the magnitude of change/impact and the sensitivity of the receptor. Consequently, the terminologies of major, moderate or minor impact, in themselves, have no bearing on whether the resulting effect at the receptor is significant e.g. all impacts which are moderate or major are significant effects. However, where the assessment considers the change in noise level, they can be helpful in giving a non-numerical indication of the degree of the change that might occur.

8.58 It should be noted that if the resulting exposure is below SOAEL, then regardless of the size of the change, the effect is generally non-significant for the purposes of the Environmental Impact Assessment. However, as indicated above, in order to comply fully with policy, reasonable steps must be taken to mitigate and reduce to a minimum those receptors exposed to noise from the source which falls between LOAEL and SOAEL.

8.59 If the resulting exposure is above SOAEL, the effect is not necessarily significant, as other factors (such as the magnitude of change or duration of the effect) may need to be taken into consideration. Where this is applicable, it is discussed in the significance criteria for that element of the assessment.

8.60 The LOAEL and SOAEL thresholds are typically set out for residential receptors as these have the highest sensitivity of the receptors being assessed. Where a receptor is of lower sensitivity, this would usually warrant higher threshold values for LOAEL and SOAEL.

8.61 The assessment methodologies and significance criteria anticipated for each element of the assessment are described below.

Construction Traffic Noise

8.62 Road traffic noise levels associated with the peak period of construction traffic will be calculated in accordance with the Calculation of Road Traffic Noise (CRTN, 1988). Predictions will be undertaken for the peak year of construction traffic, with and without construction traffic.

8.63 The magnitude of impact and significance of these effects will be determined using the thresholds set out in Table 8.1 This is based upon the guidance in Table 3.17 of DMRB.

Table 8.1 Thresholds of potential effects of construction traffic at residential receptors.

Magnitude of Impact	Increase in noise level $L_{A10, 18hr}$ (dB)
Major	Greater than or equal to 5.0
Moderate	Greater than or equal to 3.0 and less than 5.0
Minor	Greater than or equal to 1.0 and less than 3.0
Negligible	Less than 1.0
<p><i>Note: Construction traffic noise shall constitute a significant effect where it is determined that a major or moderate magnitude of impact will occur for a duration exceeding;</i></p> <p><i>a) 10 or more days or nights in any 15 consecutive days or nights</i></p> <p><i>b) A total number of days exceeding 40 in any 6 consecutive months.</i></p>	

Construction Noise

8.64 In relation to demolition and construction noise impacts, indicative noise levels will be predicted at the receptors using the methodology contained within Annex F of British Standard BS 5228-1:2009+A1:2014. The predictions will be based on informed assumptions about the construction plant and equipment that will be used during the various phases of works, where activities generate the highest levels of noise and vibration and take place closest to sensitive receptors. It is anticipated that out of hours and night works may be required for various elements of highway and railway works.

8.65 The propagation of construction noise will be predicted following the principles of the ISO 9613-2:2024 methodology, assuming moderate downwind propagation between the source and receptors.

8.66 The significance of potentially adverse construction noise effects will be determined using the LOAEL and SOAEL thresholds set out in Table 8.2. The values are based on the guidance within Annex E of BS 5228-1:2009+A1:2014 and the effects that construction noise can have on those exposed to it.

Table 8.2 Effect level thresholds and significance criteria for construction noise

Effect	Time Period (T)	Threshold value at residential receptors (LAeq,T) ^{1, 2, 3}
LOAEL	Core Hours: <ul style="list-style-type: none"> Mon - Sat 07:00 – 19:00 (12hr) 	65
	Out of Hours Works: <ul style="list-style-type: none"> Mon - Sat, 19:00-23:00 (4hr); or Sun⁴, 07:00-23:00 (16hr). 	55
	Night Works: <ul style="list-style-type: none"> Mon – Sun 23.00 – 07.00 (8hr) 	45
SOAEL	Core Hours: <ul style="list-style-type: none"> Mon - Sat 07:00 – 19:00 (12hr) 	75
	Out of Hours Works: <ul style="list-style-type: none"> Mon - Sat, 19:00-23:00 (4hr); Sun⁴, 07:00-23:00 (16hr). 	65
	Night Works: <ul style="list-style-type: none"> Mon – Sun 23.00 – 07.00 (8hr) 	55
<p>Notes:</p> <p>¹ Also considered suitable for other uses highly sensitive to noise, including schools and churches.</p> <p>² Values apply to a location one metre from a building façade containing a window, including the effect of the acoustic reflection from that façade. Usually referred to as a façade level.</p> <p>³ A significant effect is indicated if the programme of works indicates that the SOAEL threshold value is likely to be exceeded for a period of at least one month (for the purposes of this assessment, this equates to a minimum of 20 weekdays and 4 Saturdays in any four-week period).</p> <p>⁴ and Public holidays.</p>		

8.67 In addition to the criteria described in Table 8.2 that indicate when significant effects from construction noise would occur, where the predicted construction noise levels are above the LOAEL but below the SOAEL, then adverse (non-significant) effects are indicated. Where construction noise levels are below the LOAEL, no adverse effects are expected.

Construction Vibration

8.68 Where vibration generating plant will be used within 100m of receptor locations, vibration levels will be predicted using the method in BS 5228-2:2009+A1:2019. The resulting vibration level, which is in peak particle velocity (PPV mm/s), will be converted to the vibration dose value metric (VDV m/s^{-1.75}) over the standard 10 hour working day using the method in the ANC Guidelines^v.

8.69 The potential significance of construction vibration effects at the receptors will be assessed based on industry best practice on vibration², expressed in terms of LOAEL and SOAEL

² High Speed Two (HS2) Limited (2017), High Speed Two Phase One Information Paper E23: Control of construction noise and vibration

thresholds, together with the duration of any SOAEL exceedance.

Table 8.3 Effect level threshold and significance criteria for construction vibration at receptors

Effect	Time Period (T)	Threshold value at residential receptors (VDV m/s ^{1.75}) ^{1, 2, 3}
LOAEL	Day (07:00 – 23:00)	0.2
	Night (23:00 = 07:00)	0.1
SOAEL	Day (07:00 – 23:00)	0.8
	Night (23:00 = 07:00)	0.4

Notes:

¹ Also considered suitable for other uses highly sensitive to noise, including schools and churches.

² Values apply to a location on the floor inside a building, near but not at the centre of any habitable room

³ A significant effect is indicated if the programme of works indicates that the SOAEL threshold value is likely to be exceeded for two or more consecutive days.

8.70 In addition to the criteria described in Table 8.3 that indicate when significant effects from construction vibration will occur, where the predicted construction vibration levels are above the LOAEL but below the SOAEL, then adverse (non-significant) effects are indicated. Where construction noise levels are below the LOAEL, then no adverse effects are expected.

8.71 As well as considering potentially adverse effects on the occupants of buildings, consideration will also be given to potential damage to buildings and other structures from construction vibration. Based on best practice from BS 5228-2+A1:2019 and benchmark projects including HS2, a threshold of 3 mm/s, applicable to structurally sound, unsound and heritage receptors, has been selected to indicate the onset of potential damage. However, it should be noted that this threshold is precautionary and, in most cases, could be increased following further, specific investigation/condition surveys of the relevant structure where required.

Operational road traffic on surrounding highway network

8.72 The changes in road traffic noise on the surrounding road network arising from the Proposed Development when fully operational will be predicted using the methodology set out in CRTN.

8.73 Using traffic data provided by the transport consultant for the Proposed Development, the noise levels will be predicted and compared for the future baseline situation (i.e. without the Proposed Development traffic) and the flows with the Proposed Development (i.e. the future baseline plus development traffic – with development). This will also take into account the change in the future baseline conditions which will occur as a result of committed developments in the vicinity of the DCO Site.

8.74 The significance of potentially adverse road traffic noise effects will be based on a combination of:

- the resulting noise exposure at the receptors with the Proposed Development; and
- the change in noise exposure between the (future baseline) and with development scenarios.

8.75 The noise exposure thresholds for LOAEL and SOAEL are set out in Table 8.4, these have been derived from the effects that road traffic noise can have on those affected³.

Table 8.4 Threshold of potential effects of road traffic noise (residential receptors)

Time period	Effect	Noise Exposure Threshold Value
Day (07:00-23:00)	LOAEL	50 dB $L_{Aeq,16\text{ hour}}$ (free-field) ^{a,b}
	SOAEL	63 dB $L_{Aeq,16\text{ hour}}$ (free-field) ^{a,c}
Night (23.00-07.00)	LOAEL	40 dB L_{night} (free-field)
	SOAEL	55 dB L_{night} (free-field)
<p><i>Notes:</i></p> <p>^a This is the average daily value (07:00 – 23:00 hours) at a position one metre from a residential building façade containing a window, ignoring the effect of an acoustic reflection from that façade.</p> <p>^b equivalent to 55 dB $L_{A10,18hr}$ façade</p> <p>^c equivalent 68 dB $L_{A10,18hr}$ façade</p>		

8.76 The only guidance which exists in terms of assessing change in operational road traffic noise is DMRB, although this is strictly only applicable to schemes promulgated by National Highways for the Strategic Road Network rather than for other types of development such as the Proposed Development. Therefore, these criteria have been modified⁴, as set out below to reflect government noise policy; in particular that where road traffic noise levels are below the SOAEL, significant adverse effects would not generally be expected.

8.77 If the daytime or night-time with development exposure level exceeds the LOAEL threshold, Table 8.5 sets out how the magnitude of the impact is described, depending on whether the

³ The evidence for using some these values can be found in guidance from the World Health Organisation. Similar values have been used for the assessment of other schemes such as A14 DCO and Northampton Gateway DCO and are presented in the Design Manual for Roads and Bridges.

⁴ The criteria are still based on the principles of DMRB but take greater account of the with development exposure level in line with government policy. This approach was adopted for the Northampton Gateway DCO.

resulting exposure level is above or below the SOAEL, and the predicted change in noise exposure compared to the without development scenario.

- 8.78 The daytime magnitude of impact categories for the with development exposure levels which are between LOAEL and SOAEL are based on the long-term magnitude of change categories from Table 3.54b of DMRB. However, when the with development exposure level is above the SOAEL the more stringent short-term criteria from Table 3.54a of DRMB are applied to reflect that when receptors are already exposed to high levels of road traffic noise, a smaller increase in noise levels results in a higher magnitude of impact.
- 8.79 For the night-time period, the magnitude of impact categories is based on the more stringent short-term criteria from Table 3.54a of DRMB, reflecting the increased sensitivity of residential receptors during the night-time period.

Table 8.5 Descriptors of impact magnitude of daytime and night-time road traffic noise change

Magnitude of Impact	With Development Noise Exposure			
	Daytime		Night-time	
	Between LOAEL and SOAEL	SOAEL or greater	Between LOAEL and SOAEL	SOAEL or greater
No Change	0	0	0	0
Negligible	Up to 2.9 dB(A)	Up to 0.9 dB(A)	Up to 0.9 dB(A)	Up to 0.9 dB(A)
Minor	3.0 – 4.9 dB(A)	1.0 – 2.9 dB(A)	1 – 2.9 dB(A)	1.0 – 2.9 dB(A)
Moderate	5.0 – 9.9 dB(A)	3.0 – 4.9 dB(A)	3.0 – 4.9 dB(A)	3.0 – 4.9 dB(A)
Major	10.0 dB(A) and over	5.0 dB(A) and over	5.0 dB(A) and over	5.0 dB(A) and over

Identification of effect significance and other notes:

If the result for any property falls in the categories shown by the shaded boxes with text in bold, that indicates that the property is regarded as experiencing a significant adverse effect.

- 8.80 Whether or not a significant adverse effect is expected to occur will be determined by the SOAEL threshold being exceeded and the magnitude of impact exceeding 0.9 dB(A), as indicated by the shaded boxes and text in bold in Table 8.5. Note that in line with government policy (in the NPSNN and NPSE), reasonable steps would need to be taken to mitigate and minimise the non-significant adverse impacts which exceed the LOAEL but not the SOAEL, particularly those where the impact magnitude is moderate or major. Where the with development noise exposure is below the LOAEL, then no adverse effect is expected.
- 8.81 Consideration will also be given to the Noise Insulation Regulations, 1975 (as amended 1988), where applicable.

Operational railway noise from additional freight trains on the rail network

- 8.82 Changes in rail noise from additional freight trains travelling along the West Coast Mainline and the Chat Moss Line will be predicted in accordance with the methodology in the Calculation of Railway Noise (CRN) and the Additional Railway Noise Source Terms for 'Calculation of Rail Noise 1995' from Defra.
- 8.83 Impacts will be considered at receptors within a longitudinal distance along the track from the proposed connection between the main line railways and the SRFI. Whilst this longitudinal distance has not yet been determined, it will take into consideration the distance trains will require to decelerate from full speed to enter the DCO Site or accelerate up to full speed on leaving the DCO Site. In accordance with the Noise Insulation Regulations (1996) consideration will be given to receptors within a lateral distance of 300 m from the track along the identified longitudinal extent.
- 8.84 It is anticipated that predictions will be undertaken for the future baseline situation (i.e. without the Proposed Development) and then for the with the Proposed Development scenario, which would typically be when the SRFI is expected to reach full capacity in terms of the daily freight train movements. If there is potential for an interim phase, where impacts would be materially different to when the terminal reaches full capacity, this would also be assessed.
- 8.85 The significance of potentially adverse railway noise effects will be based on a combination of the change in noise exposure between the with and without development scenarios, and the resulting with development exposure level. The railway noise exposure LOAEL and SOAEL thresholds are set out in Table 8.6, these have been derived from the effects that railway noise can have on those affected⁵.

⁵ The evidence for using some these values can be found in guidance from the World Health Organisation. Similar values have been used for the assessment of other schemes such as HS2 and Northampton Gateway.

Table 8.6 Thresholds of potential effects of railway noise at residential buildings

Effect	Time Period	Threshold Value ($L_{Aeq,T}$) ^{a,b}
LOAEL	Day 07.00 – 23.00	50
	Night 23.00 – 07.00	40
SOAEL	Day 07.00 – 23.00	65
	Night 23.00 – 07.00	55
<p><i>Identification of effect significance and other notes:</i></p> <p>^a This is the average daily value at a position one metre from a residential building façade containing a window, ignoring the effect of an acoustic reflection from that façade.</p> <p>^b For the night-time period of 23.00 – 07.00, the relevant noise indicator is L_{night}.</p>		

8.86 Then approach follows the method used for road traffic noise, i.e. If the with development exposure level during the daytime or night-time period exceeds the LOAEL threshold value, Table 8.7 sets out how the magnitude of the impact is described, depending on whether the resulting level is above or below the SOAEL and the predicted change in noise exposure compared from the without development scenario.

Table 8.7 Descriptors of impact magnitude of daytime railway noise change

Magnitude of Impact	With Development Noise Exposure			
	Daytime		Night-time	
	Between LOAEL and SOAEL	SOAEL or greater	Between LOAEL and SOAEL	SOAEL or greater
No Change	0	0	0	0

Magnitude of Impact	With Development Noise Exposure			
	Daytime		Night-time	
	Between LOAEL and SOAEL	SOAEL or greater	Between LOAEL and SOAEL	SOAEL or greater
Negligible	Up to 2.9 dB(A)	Up to 0.9 dB(A)	Up to 0.9 dB(A)	Up to 0.9 dB(A)
Minor	3.0 – 4.9 dB(A)	1.0 – 2.9 dB(A)	1 – 2.9 dB(A)	1.0 – 2.9 dB(A)
Moderate	5.0 – 9.9 dB(A)	3.0 – 4.9 dB(A)	3.0 – 4.9 dB(A)	3.0 – 4.9 dB(A)
Major	10.0 dB(A) and over	5.0 dB(A) and over	5.0 dB(A) and over	5.0 dB(A) and over
<p><i>Identification of effect significance and other notes:</i></p> <p><i>If the result for any property falls in the categories shown by the shaded boxes with text in bold, that indicates that the property is regarded as experiencing a significant adverse effect.</i></p>				

8.87 Whether or not a significant adverse effect is expected to occur during the daytime or night-time period will be determined on the basis of the SOAEL threshold being exceeded and the magnitude of impact exceeding 0.9 dB(A) as indicated by the shaded boxes with text in bold in Table 8.7. Note that in line with government policy (in the NPSNN and NPSE), reasonable steps would need to be taken to mitigate and minimise impacts non-significant adverse effects which exceed the LOAEL but not the SOAEL, particularly those where the impact magnitude is moderate or major. Below the LOAEL, no adverse effects would be expected.

8.88 Where applicable, consideration will also be given to the Noise Insulation (Railways and Other Guided Transport Systems) Regulations 1996, where applicable.

Operational noise from the DCO Site

- 8.89 Operational noise from the DCO site is expected to comprise,
- rail and HGV movements inside the site boundary;
 - loading, unloading and manoeuvring activities associated with the rail terminal, lorry park and warehousing (including use of gantry cranes and reach stackers); and

- mechanical services plant serving the Proposed Development buildings.
- 8.90 To provide a robust worst-case assessment, predictions will be undertaken based on the Proposed Development operating at full capacity. If, as the proposals develop, there is potential for an interim phase where impacts would be materially different to when the Proposed Development reaches full capacity, this scenario would also be considered.
- 8.91 The prediction methodologies used will be Calculation of Railway Noise (CRN) for freight train movements inside the DCO site, and ISO 9613-2:2024 for all other sources. Use will also be made of appropriate source terms from our library data. The assessment of operational noise will be undertaken using the principles and guidance in BS 4142:2014+A1:2019⁶. The standard states that the initial extent of the impact can be determined by subtracting the typical background sound level from the rating level. The greater the difference the greater the magnitude of the initial impact estimate. The standard indicates that:
- A difference of around +10 dB⁷ or more is likely to be an indication of a significant adverse impact, depending on the context;
 - A difference of around +5 dB is likely to be an indication of an adverse impact, depending on the context;
 - Where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact, depending on the context; and
 - The lower the rating level is relative to the measured background sound level, the less likely it is that the specific sound source will have an adverse impact.
- 8.92 While the difference between the rating level and background sound level provides an initial estimate of the impact, other factors should be considered in terms of the context, such as the resultant absolute noise levels and how the character and level of the specific sound source relates to the existing sound environment.
- 8.93 Regarding consideration of the absolute levels of sound, the relevant guideline values provided in BS 8233:2014⁸ have been referenced. Table 4 of that standard sets out desirable internal levels to be achieved in new dwellings from external sources. Information is also provided regarding desirable levels of sound for external amenity spaces associated with dwellings. The various values from BS 8233:2014 are summarised in Table 8.8.

⁶ BS 4142:2014+A1:2019 Methods for rating and assessing industrial and commercial sound

⁷ BS 4142 states that: All the measurements and values used throughout this standard are “A”-weighted. Where “A” weighting is not explicit in the descriptor, it is to be assumed in all cases, except where it is clearly stated that it is not applicable, as in the case of tones.

⁸ BS 8233:2014: Guidance on sound insulation and noise reduction for buildings, BSI (2014)

Table 8.8 Summary of guideline sound levels from BS 8233:2014

Location (activity)	Time Period	Desirable Sound Level not to be exceeded (dB)
Inside Bedrooms and Living Rooms (resting)	Day (07:00 – 23:00)	35 - 40 dB $L_{Aeq,T}$
Inside Bedrooms (sleeping)	Night (23:00 – 07:00)	30 - 35 dB $L_{Aeq,T}$
Inside Dining Room/area (dining)	Day (07:00 – 23:00)	40 - 45 dB $L_{Aeq,T}$
External Amenity Space	Day (07:00 – 23:00)	50 - 55 dB $L_{Aeq,T}$

- 8.94 The lower values shown in Table 8.8 are generally regarded as the LOAEL for steady external sound, i.e., no adverse effect due to the impact of the sound would be expected. If the sound has certain acoustic characteristics, it could be appropriate to consider a lower value as the LOAEL or apply a correction for those characteristics to the predicted levels.
- 8.95 The World Health Organisation’s Guidelines for Community Noise will be used to consider the potential impact from any maximum short-term noise levels from SRFI operations during the night-time period.
- 8.96 The guidelines state that, for good sleep, indoor sound pressure levels should not exceed around 45 dB L_{AFmax} more than 10–15 times per night. This is equated to a level at the outside façade of 60 dB L_{AFmax} with a partially open window. It is generally accepted that this criterion is a LOAEL.⁹
- 8.97 The Institute of Environmental Management and Assessment (IEMA) published their Guidelines for Environmental Noise Impact Assessment in 2014. The document describes a process for undertaking such assessments. It notes that the extent of the effects of noise impact can rarely be determined solely by the difference between current and future noise levels, and that there are other factors to consider when determining potential effects. This principle will be followed in the assessment.

⁹ There is no equivalent research regarding the probability of a noise-induced awakening from sources such as those which would occur at the SRFI. Hence the approach to maximum noise levels is based on WHO guidance.

Operational railway vibration from additional freight trains on the rail network

- 8.98 Potential changes in railway vibration from additional freight trains travelling along the West Coast Mainline and the Chat Moss Line will be predicted using the results of the baseline vibration survey and factoring them in accordance with the increased number of freight trains during the day and night-time periods.
- 8.99 As with the noise assessments, impacts will be considered at receptors within longitudinal distance along the track from the proposed connection point with the mainline railways and the RFI. Whilst this longitudinal distance has not yet been determined, it will take into consideration the distance that it will take trains to decelerate from full speed to enter the DCO Site or accelerate up to full speed on leaving the DCO Site. Consideration will be given to receptors within a lateral distance of 100 m from the track. Beyond this lateral distance no significant effects would be experienced.
- 8.100 It is anticipated that predictions will be undertaken for the baseline situation (i.e., without the Proposed Development) and with development scenarios, which would typically be when the Rail Terminal is expected to reach full capacity in terms of the daily freight train movements.
- 8.101 The thresholds of LOAEL and SOAEL for railway vibration are set out in Table 8.9 below, together with the descriptors for the magnitude of impact. These have been derived from the guidance in BS 6472:2008 and are expressed in terms of Vibration Dose Value (VDV).

Table 8.9 Thresholds of potential effects of railway vibration at residential buildings

Effect	Impact Description	Vibration Exposure	
		VDV Daytime (m/s ^{1.75})	VDV Night-time (m/s ^{1.75})
Below LOAEL	Negligible	< 0.2	< 0.1
Between LOAEL and SOAEL	Minor	≥ 0.2 to 0.4	≥ 0.1 to 0.2
	Moderate	> 0.4 to < 0.8	> 0.2 to < 0.4
SOAEL	Major	≥ 0.8	≥ 0.4

Notes:

^a Usually determined in the centre of a normally loaded floor within the dwelling.

8.102 The criteria presented above for determining the extent of the impacts and effects of noise and vibration inherently reflect the potential effects on human health and wellbeing, and thus enable any adverse effects from the Proposed Development to be identified. Where threshold values are presented, these are generally based on residential dwellings and private amenity spaces to reflect the impact on human health. The greater the adverse effect at the receptor, the greater the potential impacts on human health and wellbeing.

PRELIMINARY ASSESSMENT OF POTENTIAL EFFECTS

8.103 The Proposed Development is anticipated to have the following potential effects during the construction phase:

- demolition and construction noise associated with the SRFI affecting receptors surrounding the DCO Site. This would comprise all works within the draft Order Limits including: warehousing, the rail turnback track, additional track and the RFI terminal itself.
- construction noise from highway works/highways mitigation on the local road network affecting receptors in the surrounding area.
- construction traffic noise from vehicles travelling to and from the DCO Site affecting receptors on the surrounding road network.
- demolition and construction vibration associated with the DCO Site or any highway works will be considered where vibration generating activities will occur within 100 m¹⁰ of sensitive receptors. At greater distances from the sensitive receptors, these effects would be scoped out of the assessment as they will not be expected to give rise to any adverse or significant adverse effects.

8.104 During the operational phase, the Proposed Development is anticipated to have the following potential effects:

- change in road traffic flows and resulting noise levels on the highway network around the DCO Site;
- noise from HGVs serving the SRFI travelling on the internal roads within the DCO Site;
- noise and vibration¹¹ from additional freight trains serving the SRFI on the West Coast Mainline and the Chat Moss Line;

¹⁰ DMRB LA111 indicates that for construction vibration a study area of 100m from the closest construction activity with the potential to generate vibration is normally sufficient to encompass vibration sensitive receptors.

¹¹ As per the construction vibration assessment, the study area will be limited to receptors within 100m of the line.

- noise and vibration¹² from freight trains serving the Rail Terminal travelling within the DCO Site, potentially including noise from wheel squeal on tight radii bends;
- noise from loading and unloading activities associated with the Rail Terminal, which may involve use of gantry cranes and reach stackers to move freight containers;
- noise from HGVs and other operational activities at the DCO Site , such as manoeuvring, loading and unloading at the proposed warehouses and Rail Terminal; and
- mechanical services plant noise associated with the warehousing at the DCO Site.

8.105 It is not anticipated that there will be any significant vibration effects from HGVs using new access roads or the Parkside Link Road, as these would be newly surfaced, smooth and free of irregularities. Therefore, operational vibration from the Parkside Link Road and new access roads is proposed to be scoped out of the assessment.

8.106 Regarding road traffic on the surrounding road network giving rise to ground borne vibration, it is rare that this would result in perceptible levels of vibration within sensitive receptors. The main cause of this type of vibration is vehicles passing over irregularities in the road surface rather than as a direct result of any change in traffic volume on the surrounding highway network. Although it is expected that some HGVs would use the access roads to the Proposed Development, it is not anticipated that there will be any significant vibration effects as the access roads would be newly surfaced and smooth. Therefore, this is proposed to be scoped out of the assessment.

8.107 Regarding road traffic on the surrounding road network giving rise to ground borne vibration, it is rare that this would result in perceptible levels of vibration within sensitive receptors. The main cause of this type of vibration is vehicles passing over irregularities in the road surface rather than as a direct result of any change in traffic volume on the surrounding highway network. As such it is proposed that this can be scoped out of the assessment and explanation is provided about how the surrounding road network, which will carry the higher volumes of HGV traffic to the Proposed Development will be maintained to prevent irregularities and potential vibration issues arising. Operational vibration from roads is scoped out in DMRB as a maintained road surface will be free of irregularities and therefore operational vibration will not have the potential to give rise to significant adverse effects.

PROPOSED AVOIDANCE AND MITIGATION MEASURES

8.108 For the noise and vibration assessment, mitigation will be required for any significant effects to avoid them as far as practicable. In addition, for effects which are not significant but are adverse, i.e., they lie between the LOAEL and the SOAEL, reasonable steps should be taken to mitigate and minimise such effects, in the context of government policy on sustainable development (as set out in the NPSNN and NPSE).

¹² As per the construction vibration assessment, the study area will be limited to receptors within 100m of the line.

Construction Phase

8.109 Any construction impacts will be temporary and will be managed using Best Practicable Means (BPM). There will also be a framework Construction Environmental Management Plan (CEMP) which will set out the measures that will be undertaken to monitor, mitigate and manage construction noise and vibration (among other potential effects) and a Construction Traffic Management Plan (CTMP).

Operational Phase

8.110 At the time of writing, specific mitigation measures have not been identified; however, opportunities to incorporate embedded mitigation will be explored as the proposals evolve. The type of embedded mitigation measures that will be considered include:

- Following good acoustic design principles where practicable.
- Acoustic bunding and barriers.
- Layout and orientation of buildings within the DCO Site.

8.111 Additional mitigation measures will be considered which will include the use of on plot mitigation such as barriers and enclosures, and where there are no other viable solutions, there is a potential that sound insulation packages may be offered to receptors.

UNCERTAINTIES

8.112 The following assumptions will be relevant to the noise and vibration assessment:

- As no contractor will be on board prior to submission of the ES, the construction methods and equipment likely to be used will be estimated based on a combination of experience of other similar developments and information specific to the ILPN RFI. These assumptions will be clearly documented in the assessment and will provide a reasonable worst-case scenario.
- A number of assumptions will be made in terms of the types, locations and intensity of operational activities at the DCO Site (both at the warehousing and the SRFI). These assumptions will be made in combination with the rail consultant, traffic consultant and, if applicable, the potential future operator of the Rail Terminal. Once again, all assumptions will be documented in the assessment and will provide a reasonable worst-case scenario.
- With regard to noise from mechanical services plant associated with the warehousing, as the details of this plant will not be available at the time of assessment, target levels will be set for receptor locations according to the background sound levels measured during the baseline noise surveys.

8.113 The following limitations will apply to the assessment:

- It is impractical to predict the potential noise impact and effects from the various

elements of the Proposed Development at every nearby noise-sensitive property. Instead, as is common practice, representative receptors will be carefully selected based on their location relative to the different sources of noise within the development, and their location with respect to other noise-sensitive properties nearby. Receptors used in the assessment will represent a worst-case scenario, with those at greater distances experiencing lower level of impact.

- It is also not practicable to measure the existing noise and vibration environment at every receptor location; therefore, representative noise and vibration monitoring positions have been identified and discussed with SHBC. These will also be discussed with Wigan Council, as soon as possible and will also be discussed with Warrington Borough Council.
- The baseline noise surveys will be undertaken for a period of time considered suitable to determine the typical sound levels at the monitoring locations - it is not proportionate to monitor continuously at the identified locations. It is also noted that access to some proposed locations may be restricted, which may result in the use of proxy locations that are representative of the locations of interest.

SUMMARY OF PROPOSED EIA SCOPE

Table 8.10 Summary of noise and vibration impacts proposed to be scoped in and out of the EIA

Impacts	Scoped in or out?	Justification
Construction		
Construction traffic noise	In	Potential for adverse/significant adverse effects to arise
Construction noise	In	Potential for adverse/significant adverse effects to arise
Construction vibration	In – up to distance of 100 m from nearest construction activity likely to induce vibration	Potential for adverse/significant adverse effects to arise
	Out – beyond distance of 100 m from nearest construction activity likely to induce vibration	Not anticipated that there would be any adverse/significant adverse effects beyond this distance

Impacts	Scoped in or out?	Justification
Operation		
Operational road traffic noise on surrounding highway network	In*	Potential for adverse/significant adverse effects to arise
Operational railway noise from additional freight trains	In*	Potential for adverse/significant adverse effects to arise
Operational noise from the DCO Site	In*	Potential for adverse/significant adverse effects to arise
Operational railway vibration from additional freight trains	In*	Potential for adverse/significant adverse effects to arise
Operational vibration from vehicles travelling along Parkside Link Road or new access roads	Out	No adverse/significant adverse effects expected as surface will be free of irregularities
Operational vibration from vehicles travelling along existing highway network	Out	No adverse/significant adverse effects expected provided roads are maintained (an explanation of how roads would be maintained to prevent irregularities to be provided in ES Chapter).
<p><i>Notes to the table:</i></p> <p><i>*subject to the spatial scope identified.</i></p>		

REFERENCES

-
- ⁱ National Policy Statement for National Networks, Department for Transport (2024)
- ⁱⁱ Noise Policy Statement for England, Defra (2010)
- ⁱⁱⁱ Ministry of Housing, Communities & Local Government (2023) National Planning Policy Framework
- ^{iv} Department for Levelling Up, Housing and Communities and Ministry of Housing, Communities and Local Government (2019), Planning Practice Guidance: Noise. <https://www.gov.uk/guidance/noise--2>
- ^v The Association of Noise Consultants (2020), ANC Guidelines: Measurement & Assessment of Groundborne Noise & Vibration (ANC Guidelines);

Chapter 9 ◆ Landscape and Visual Impact

INTRODUCTION

- 9.1 Landscape and visual effects are separate, although closely related and interlinked issues. As such, the assessment of the effects of the Proposed Development upon the landscape and visual amenity will be carried out under separate headings within the Landscape and Visual Impact Assessment (LVIA).
- 9.2 The assessment of landscape effects considers the potential effects of the Proposed Development on the landscape. Landscape effects are caused by physical changes to the landscape, which may result in changes to the distinctive character of that landscape and how it is perceived.
- 9.3 The visual assessment is concerned with the potential effects that may occur resulting from the Proposed Development upon the population likely to be affected. It assesses the change in visual amenity experienced by people arising from the presence of a development in the view.
- 9.4 The LVIA will be undertaken in accordance with best practice guidance set out in the Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (hereafter referred to as the GLVIA). Where appropriate, reference will be made to other environmental topics and other chapters of the ES.
- 9.5 Drawing on published standards and guidance, landscape and visual assessment relies on an element of reasoned professional judgement. The assessment will be undertaken by Chartered Members of the Landscape Institute (CMLI) with experience of assessing the landscape and visual effects of large-scale infrastructure developments.
- 9.6 In line with the EIA Regulations, this Scoping Report chapter has been compiled by appropriately qualified, experienced, and competent experts. The author of this Scoping Report chapter and competent expert responsible for the production of the LVIA is John Meehan MLPM CMLI, a Landscape Architect with over 20 years' of relevant industry experience in the UK who holds a master's degree in landscape planning and chartered status with the Landscape Institute. John has worked on numerous large-scale infrastructure projects across the UK, including rail freight developments and has experience representing landscape and visual issues at topic hearings as part of the nationally significant infrastructure project application process.

RELEVANT LAW, POLICY AND GUIDANCE

- 9.7 The DCO will be assessed against the Infrastructure Planning (Decisions) Regulations 2010 and National Networks National Policy Statement ('NPSNN', adopted 2024). National and local

policy relevant to the LVIA are material considerations, and therefore which has influenced the methodology set out in this scoping chapter, is summarised within the subsequent sections.

Legislative Context

European Landscape Convention 2007

- 9.8 The UK Government is a signatory of the European Landscape Convention (ELC), which became binding in March 2007. The ELC is aimed at the protection, management and planning of all landscapes and raising awareness of the value of a living landscape. It relates chiefly to public bodies and to the policies, plans and programmes produced by these.
- 9.9 LVIA is a development specific process which accords with Article 6C. This LVIA is informed by extant Landscape Character Assessment studies which more directly relate to the provisions of Article 6C.

National Planning Policy

National Networks National Policy Statement (2024)

- 9.10 National-level planning policies for NSIPs are set out in a series of National Policy Statements (NPSs). The NPS of relevance to the Proposed Development is the National Networks NPS (NPSNN) which was last updated in March 2024. The NPSNN is the primary statement of policy for NSIPs on the road and rail networks and forms the basis for decisions by the Secretary of State.
- 9.11 The National Planning Policy Framework (NPPF), and the accompanying online Planning Practice Guidance (PPG) are also important and relevant but are not the key policy documents against which the application will be determined.
- 9.12 Relevant policies from the NPSNN are summarised in Table 9.1. Please note that the Proposed Development is not located within a nationally designated landscape (i.e. a National Park or National Landscape) and as such references made to effects on designated landscapes within the NPSNN are not included.

Table 9.1 Summary of National Planning Policy

Document	Policy / Paragraph Reference	Summary of Policy / Paragraph
NPSNN (March 2024)	Landscape and visual impacts Paragraph 5.161	Requires that LVIA should be carried out and reference is made to the third edition of Guidelines for Landscape and Visual Impact Assessment (GLVIA3) published by the Landscape Institute. Construction and operation stages should be

Document	Policy / Paragraph Reference	Summary of Policy / Paragraph
		<p>considered.</p> <p>Local development policies should be taken into account.</p>
	<p>Landscape and visual impacts</p> <p>Paragraph 5.162</p>	<p>Consideration should be given to the impact of noise and light pollution effects, including on local amenity, dark skies, tranquillity, and nature conservation.</p> <p>The applicant should demonstrate how such effects would be minimised during construction and operation stages.</p>
	<p>Landscape and visual impacts</p> <p>Paragraph 5.164</p>	<p>With regards mitigation of effects, <i>“the project should be designed, and the scale minimised, to avoid or where unavoidable, mitigate the visual and landscape effects, during construction and operation, so far as is possible while maintaining the operational requirements of the scheme.”</i></p>
	<p>Landscape and visual impacts</p> <p>Paragraph 5.165</p>	<p>Requires that projects should be designed carefully, taking account of the potential impact on the landscape.</p>
	<p>Landscape and visual impacts</p> <p>Paragraph 5.166</p>	<p>This paragraph states that <i>“adverse landscape and visual effects may be minimised through appropriate siting of infrastructure, design (including choice of materials), and topographical interventions (for example, creation of bunds or lowering of ground level).</i></p> <p><i>Also, landscaping schemes (including screening options and design elements that soften the built form such as green bridges), depending on the size and type of the proposed project. Materials and designs for infrastructure should always be given careful consideration in terms of environmental standards.”</i></p>

Document	Policy / Paragraph Reference	Summary of Policy / Paragraph
	Landscape and visual impacts Paragraph 5.167	Off-site landscape mitigation should be considered. For example, filling in gaps in tree and hedge lines to mitigate more distant views.
	Landscape and visual impacts Paragraph 5.168	Applicants should consider how landscapes can be enhanced using landscape management plans.
	Landscape and visual impacts Paragraph 5.169	<p>With regards potential landscape effects of the project, consideration should be given to <i>“the existing character of the local landscape, its capacity to accommodate change and nature of the effect likely to occur.”</i></p> <p>In addition with regards design: <i>“Projects need to have regard to siting, orientation, height operational and other relevant constraints. The aim should be to avoid or minimise harm to the landscape, where adverse impacts are unavoidable providing reasonable mitigation and deliver landscape enhancement measures where possible and appropriate.”</i></p>
	Landscape and visual impacts Paragraph 5.175	<p>It is acknowledged by the NPSNN that outside nationally designated landscapes, there are landscapes that may be valued locally and protected by local policy.</p> <p>With regards local landscape value it states: <i>“Where a local development plan in England has policies based on landscape character assessment, and has identified landscapes of local value, these should be given particular consideration. However, such areas should not be used in and of themselves as reasons to refuse consent, as this may unduly restrict acceptable development.”</i></p>
	Landscape and	A summary requirement with regards the Secretary of

Document	Policy / Paragraph Reference	Summary of Policy / Paragraph
	visual impacts Paragraph 5.177	State’s decision is that they “ <i>should consider whether the project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to avoid adverse effects on landscape or to minimise harm to the landscape, including by appropriate mitigation.</i> ”
	Landscape and visual impacts Paragraph 5.178	With regards weight attributed to the visual effects of a project: “ <i>The Secretary of State will have to judge whether the visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, outweigh the benefits of the development.</i> ”
	Land Use, including Open Space, Green Infrastructure and Green Belt Paragraphs 5.179 to 5.182	Green infrastructure should be considered when designing the Proposed Development as it can prevent or reduce environmental impacts and enable developments to provide positive environmental, social and economic benefits. The re-use of previously developed land for new development should be considered. However it is acknowledged in the NPSNN that this may not be possible for some forms of infrastructure, including strategic rail freight interchanges.

Local Planning Policy

9.13 Local Planning Policy relevant to the LVIA is set out in the following documents:

- St. Helens Borough Local Plan up to 2037 (St Helens Borough Council, 2022).
- Wigan Local Plan: Core Strategy (Wigan Council, 2024).
- Places for Everyone Joint Development Plan for Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Tameside, Trafford and Wigan to 2039.
- Warrington Local Plan (Warrington Borough Council, 2023).

9.14 Relevant policies from the above documents are summarised in Table 9.2.

Table 9.2 Summary of Local Planning Policy

Document	Policy / Paragraph Reference	Summary of Policy / Paragraph
St. Helens Borough Local Plan	Policy LPA02: Development Principles	Sets the strategy for new development in St. Helens, including that development should contribute to a high quality built and natural environment by taking account of the Borough’s landscape character and townscape and the distinctive roles and settings of different areas of the Borough, in the location and design of new development. With particular regard to protecting and enhancing the natural, built and historic environment.
	Policy LPA08: Green Infrastructure	Sets the strategy for Green Infrastructure (GI) throughout the Borough. The policy aims to protect, enhance and sustain natural assets and increase accessibility and connectivity between them. It outlines the various functions of the GI network, ranging from recreation to biodiversity and air quality. It also highlights the contribution GI makes to landscape character, helping to provide a sense of place and distinctiveness.
	Policy LPC09: Landscape Protection and Enhancement	This policy outlines the key proposals for new development in relation to Landscape Protection and Enhancement. It references the St. Helens Landscape Character Assessment and Merseyside Historic Character Study as key guidance to ensure conservation and enhancement of the local landscape. It makes reference to the need for appropriate mitigation measures where the landscape or visual character may be negatively impacted by the development.
	Policy LPC10: Trees and Woodland	Requires new development to conserve, enhance, and / or manage existing trees, woodland and hedgerows. Requires the design of the development proposals to be laid out in a manner that would retain any tree subject to a Tree Preservation Order,

Document	Policy / Paragraph Reference	Summary of Policy / Paragraph
		or any other protected tree of value. This also includes any length of hedgerow.
	Policy LPD01: Ensuring Quality Development	This policy requires that development proposals should have regard to their scale, location, and nature, to meet or exceed requirements which include (amongst other factors): maintaining or enhancing the character and appearance of the local environment, for example with regard to the siting, layout, massing, scale, design and materials used in any building work, the building-to-plot ratio and landscaping; and respect any existing natural features of the site.
	Policy LPD06: Prominent Gateway Corridors	<p>The prominent gateway corridors include the lengths of motorways, 'A' roads, waterways, and railway lines that cross the Borough. All proposals for new development that would be within or visible from one or more prominent gateway corridor(s) must, as appropriate, having regard to its scale and nature:</p> <p>a) be of high architectural quality, ensuring that the density, design, height, and layout of any building(s) respond positively to the site and its setting; and</p> <p>b) provide appropriate landscaping as an integral part of their design and layout.</p>
Wigan Local Plan	Policy CP2: Open Space, Sport and Recreation	This policy seeks to protect and enhance valuable open spaces, sporting and recreational facilities so as to maximise opportunities for people to undertake a wide range of sport and recreation activities throughout the borough, by (amongst other factors): maintaining and enhancing walking and cycling routes through parks and open space where they provide appropriate links within the wider network of routes.
	Policy CP10: Design	This policy states that the council will improve the built environment of the borough and help make it a

Document	Policy / Paragraph Reference	Summary of Policy / Paragraph
		<p>better place to live, visit and for businesses to locate and thrive by ensuring that, as appropriate, new development (amongst other factors): respects and acknowledges the character and identity of the borough and its locality, in terms of the materials, siting, size, scale and details used; is integrated effectively with its surroundings and helps to create attractive places; and incorporates high quality landscaping.</p>
<p>Places for Everyone Joint Development Plan to 2039</p>	<p>Policy JP-G1</p>	<p>This policy outlines how new development should respond to the special qualities and sensitivities of the key landscape characteristics of its location, in relation to the Landscape Character Types identified and how they relate to features such as topography, land use, field pattern, settlement and perceptual qualities.</p> <p>This policy states regard should be had to the Greater Manchester Landscape Character and Sensitivity Assessment (GMLCSA, 2018), in particular its guidance on future development and landscape management/enhancement within areas covered by each landscape character type.</p>
	<p>Policy JP-G2</p>	<p>Sets the strategy for the Green Infrastructure Network, including protection, management and enhancement. It outlines how development within and around the GI Network should be consistent with delivering major green infrastructure improvements within them.</p>
	<p>Policy JP-G7</p>	<p>This policy outlines the aims and objectives of the Greater Manchester Tree and Woodland Strategy, which is to significantly increase tree cover, protect and enhance woodland and to connect people to the trees and woodland around them.</p>
	<p>Policy JP-G9</p>	<p>This policy outlines the five purposes of the Green Belt, as set out in national policy. Particular focus is</p>

Document	Policy / Paragraph Reference	Summary of Policy / Paragraph
		<p>given to green infrastructure enhancement such as improved public access and habitat restoration.</p>
	<p>Policy-P1: Sustainable Places</p>	<p>This policy supports Greater Manchester’s aim to become one of the most liveable city regions in the world, consisting of a series of beautiful, healthy and varied places. It supports conservation and enhancement of the natural environment and development which acknowledges the character and identity of its locality. It requires that development should be: <i>“Visually stimulating, creating interesting and imaginative environments which raise the human spirit through the use of green space, public art and quality design.”</i></p>
<p>Warrington Local Plan</p>	<p>Policy DC1: Warrington’s Places</p>	<p>This policy seeks to ensure that proposed development respects the unique attributes of spatial areas within Warrington. While the DCO Site doesn’t fall within Warrington authority, it is directly adjacent and therefore this policy is taken into account with regards the potential visibility of the Proposed Development on areas which fall within Warrington.</p>
	<p>Policy DC6 - Quality of Place</p>	<p>This policy advocates that good design should be at the core of all development proposals having regard to various principles, which include a requirement to respect, sustain and make a positive contribution to local character and distinctiveness within the surrounding area, and where appropriate the landscape setting, having regard to density, street layouts, scale, height and massing. While the DCO Site doesn’t fall within Warrington authority, consideration will be given to landscape character within the Study Area, including Warrington landscape character areas.</p>

CONSULTATION TO DATE

- 9.15 At this stage, preliminary consultation has been undertaken with St Helens Borough Council in relation to the LVIA. On 15 August 2024, a meeting was held with representatives of St Helens Borough Council, including the Countryside, Trees and Woodland Officer regarding the Proposed Development. At this meeting, introductions were made and the following points were discussed:
- It was confirmed that the preliminary list of representative viewpoints would be presented to the Council for comment and input.
 - Winter photography has been captured from initial viewpoint locations and that as this represents a ‘worst-case’ in terms of visibility across the landscape, it will form the focus of the assessment of visual effects.
 - The landscape baseline study will focus on local landscape character assessments produced by the authorities which are located within the LVIA study area, i.e. St Helens, Wigan and Warrington Councils.
 - The preliminary study area comprises 5km, however this will be reviewed and refined as necessary based on further desk and site studies.
 - Confirmation that the landscape masterplan for the Proposed Development will be developed in conjunction with other environmental consultants, including ecology and heritage for example, while also liaising with technical design consultants such as on the railway design and architecture.
 - With regards rights of way within the DCO Site, assurance was given that a right of way strategy will be developed with a design focus on both functionality and amenity.
- 9.16 Full details of any consultation carried out in relation to the LVIA will be provided within the ES. Aside from St Helens Council, consultation will be carried out with the other authorities which are located within the study area, i.e. Wigan Council and Warrington Borough Council.

BASELINE CONDITIONS AND MAIN ISSUES

The DCO Site and its Surroundings

- 9.17 The DCO Site location is shown on Figure 9.1 accompanying this Scoping Report. The definition of the Study Area is explained in the subsequent ‘Approach and Methodology’ section and is shown on Figure 9.1.
- 9.18 The DCO Site is located on the eastern extent of Newton-le-Willows in a flat, agricultural landscape. The centre of St Helens is located 9km west of the DCO Site, Wigan is 10km north and Warrington is located 6km to the south. The M6 motorway is located beside the western extent of the Main Site, the Liverpool-Manchester railway line (the Chat Moss Line) is located on the northern boundary of the DCO Site and the West Coast Mainline is located at the western extent of the Western Rail Chord.

9.19 While the DCO Site comprises open fields, with limited built form, the majority of the wider study area is developed. The northern extent of the study area comprises towns, such as Golborne, Lowton, which comprise a relatively dense built areas and which are surrounded by flat, open farmland and recreational land such as Haydock Park Racecourse. The southern extent of the study area comprises the northern extent of Warrington, which is a much larger town and which extends to the south of the M62 motorway, in addition to the smaller settlements of Winwick and Croft.

Landscape Designations

9.20 The DCO Site is not covered by any statutory or non-statutory landscape designations and there are no statutory landscape designations covering the study area.

Green Belt

9.21 Part of the DCO Site is located within the Green Belt. The section of the DCO Site which is located within Wigan Council's boundary is within Green Belt, except for the area covered by Highfield Moss SSSI. In addition, within the remainder of the DCO Site, which is located within St Helens, the following parcels of land are also within the Green Belt and subject to site allocations:

- The area which falls within the Parkside East allocation for SRFI/employment development (as per local plan allocation LPA09);
- A triangular land parcel located to the north of the Liverpool-Manchester rail line (bounded by Parkside Road to the west);
- Parkside West is allocated for employment development with SRFI rail turn-back safeguarding provision (as per local plan allocation LPA10); and
- A small area between the Parkside East allocation and the Highfield Moss SSSI.

9.22 Essential characteristics of the Green Belt are openness and permanence. While Green Belt is not designated to preserve landscape quality or visual amenity, case law has established that the openness of Green Belt has a visual dimension.

9.23 The findings of an LVIA are often referred to when considering the acceptability of a development in Green Belt. However, case law has also established that the visual impact of development on the openness of Green Belt is but one matter that may be considered as part of a wider planning judgement on potential harm to the Green Belt. The Green Belt will be addressed fully in the Planning Statement, however a section will be included in the LVIA which considers potential visual impact on openness due to the Proposed Development, based on the information gathered as part of the visual assessment.

Landscape Character Assessment and Other Studies

National

9.24 At a national level, 159 National Character Areas (NCA) have been identified by Natural

England. The DCO Site is located within NCA 60 Mersey Valley and NCA 56 Lancashire Coal Measures. NCAs provide background and context to more detailed landscape character assessments produced at a local level by the host authorities. Their broad geographic reach means that the key characteristics identified as typical of a particular NCA may not necessarily apply to a specific location within that NCA. However, the key characteristics of NCAs 60 and 56 will be summarised within the LVIA, along with a summary of the relevant Statements of Environmental Opportunity for the NCAs and how the Proposed Development may affect the opportunities identified.

Local

9.25 The study area includes the following three published local landscape character levels:

- Landscape Character Assessment for St Helens (St Helens Council, 2006).
- Warrington: A Landscape Character Assessment (Warrington Borough Council, 2007).
- Wigan: A Landscape Character Assessment (Wigan Council, 2009).

9.26 Additionally, the Wigan Character Assessment is referenced in a Greater Manchester Combined Authority document: Greater Manchester Landscape Character and Sensitivity Assessment (2018). This study provides an update to the areas identified in the district level landscape character assessments and will therefore be referenced in relation to the Wigan landscape character areas.

9.27 The local landscape character studies are of an appropriate level of detail that they will form the basis of the assessment of landscape effects of the Proposed Development. The local character assessments describe character types and areas within the study area and while the effects of all such areas which would be subject to some visual influence of the Proposed Development will be considered in the landscape assessment, there will be focus on the direct change to the host character areas, i.e. those which the DCO Site falls within:

- St Helens AM4: Highfield Moss; and
- Wigan 6A: Highfield Moss.

9.28 Refer to Figure 9.1 which illustrates the location of local landscape character areas.

Visual Baseline

Zone of Theoretical Visibility

9.29 A preliminary Zone of Theoretical Visibility (ZTV) for the Proposed Development is presented in Figure 9.2. The initial ZTV has been modelled based on a height of 35m from the existing ground level to reflect the maximum height above ground of the buildings. As described in Chapter 3: The Proposed Development, in order to meet with market demands, a height of 35m has been set as a maximum parameter for the purposes of EIA scoping. It is anticipated that this height will be measured from finished ground level. As the layout of buildings within the Proposed Development is yet to be finalised, it was assumed in modelling the ZTV that

there may be buildings throughout the DCO Site to ensure that a worst-case scenario has been adopted in the ZTV and therefore guide the preliminary landscape and visual assessment process.

9.30 The ZTV in Figure 9.2 has been produced using a LIDAR Digital Surface Model (DSM) available from the Environment Agency under the terms of the Open Government Licence. The ZTV produced using the DSM reflects the presence of screening features in the landscape. However, it does not distinguish between the ground surface and the surface of structures and vegetation. As a consequence, the ZTV output may occasionally indicate visibility from areas known to be occupied by woodland and buildings at which there wouldn't necessarily be a view. Professional judgement and the findings of preliminary site studies have been applied to the interpretation of the ZTV to ensure that all potential receptors will be identified.

9.31 The following are initial observations regarding the preliminary ZTV and site observations:

- The main zone of theoretical visibility would be due to proposed structures within the Main Site, located to the east of the M6 motorway. Parts of the Proposed Development which would be located to the west of the M6 (the Western Rail Chord) would be contained within the Parkside West development and therefore would have much less visual influence on the Study Area.
- The relatively flat nature of the study area suggests that there would be theoretical visibility of the Proposed Development from the majority of the study area. However, the ZTV, which is based on DSM data, illustrates that the actual visual influence of the Proposed Development would be much more limited and site surveys have confirmed this.
- The main zone of visibility would comprise an area within a radius of approximately 2km to the east and 1.5km to the north of the DCO Site boundary. The area to the east includes open farmland and the small villages of Kenyon and Croft. The area to the north comprises the very southern extent of Golborne and specifically an east-west ridge which affords views over parts of the DCO Site.
- Views from the west would be more restricted, predominantly due to the screening effect of tree cover beside the M6 motorway. However, there would be potential visibility of the Main Site from areas to the west, including the eastern edge of Winwick, with potential views across flat, open farmland.
- There is an area of the ZTV to the west, south-west of the DCO Site between 2 and 4km from the DCO Site boundary within which there is ZTV coverage. Site surveys have confirmed that tree cover in the intervening landscape would limit views of the Proposed Development from here, however it will be considered fully in the LVIA.
- Similarly there are small areas of high ground within the wider study area which have been identified in the ZTV: Skylark Hill, Haydock, which is 3km west, north-west of the DCO Site; and Culcheth Heights, which is 4km east of the DCO Site.

Viewpoints

- 9.32 The LVIA will include a detailed assessment of visual effects from a series of predetermined viewpoint locations. Viewpoints fall into three categories, as set out in the GLVIA:
- Representative viewpoints (which represent the experience of different types of receptors in the vicinity;
 - Specific viewpoints (a particular view, for example a well-known beauty spot); and
 - Illustrative viewpoints (which illustrate a particular effect / issue, which may include limited/ lack of visibility).
- 9.33 Initial site surveys and the findings of the ZTV have been used to identify a provisional list of 14 no. viewpoints and develop an understanding of the location of visual receptors within the study area. Further ZTV analysis will be carried out as the ILPN SRFI develops, however this provides an initial focus to the location of visual receptors.
- 9.34 It should be noted that the viewpoint itself is not the receptor. Rather it is the people that would be experiencing the view from it. Receptor groups within the study area that are likely to experience views of the Proposed Development include:
- Local residents;
 - Users of public rights of way, and other routes / land with public access;
 - Road users.
- 9.35 The provisional list of 14 viewpoints is set out below in Table 9.3, with the intention that a final list is agreed with consultees following receipt of comments (and any further post-scoping consultation that is required). The viewpoints have been selected to pick up the range of views towards the DCO Site experienced by receptors in the study area from various distances, elevations, and angles.
- 9.36 Viewpoint locations are illustrated indicatively on Figure 9.2. Preliminary visual surveys have been carried out from these locations and so they have been precisely located in the field to show the clearest views towards the Proposed Development.

Table 9.3 Viewpoint Locations

Viewpoint	Location (including the local authority)	Co-ordinates and elevation (AOD)	Receptor Type
1	Permissive footpath close to the Chat Moss Line and the Huskisson Memorial	360474, 395490 28m	Recreational users of the permissive footpath.

Viewpoint	Location (including the local authority)	Co-ordinates and elevation (AOD)	Receptor Type
	Located within the boundary of St Helens Borough Council		
2	Footpath beside Highfield Moss Located within the boundary of St Helens Borough Council	361064, 395584 23m	Nearby residential receptor (Highfield Farm) and recreational users of the footpath. This right of way is St Helens 665, leading to Wigan route no. 91.
3	Footpath close to Kenyon Hall Farm Located within the boundary of Wigan Council	361974, 395013 18 m	Recreational users of the footpath which connects into the DCO Site from the vicinity of Kenyon Hall Farm (café). This right of way is Wigan route no. 101.
4	Croft Located within the boundary of Warrington Borough Council	363092, 393968 24m	Residential receptors in Croft and recreational users of footpaths. This right of way is Warrington route no. 24.
5	Winwick Interchange Located within the boundary of Warrington Borough Council	361546, 394163 22 m	Position on a pavement beside the southern extent of the DCO Site.
6	Golborne Road, Winwick Located within the boundary of Warrington Borough Council	360436, 393288 26 m	Residential receptors in Winwick and recreational users of footpaths. The viewpoint position is located on a pavement beside the road leading north out of Winwick.

Viewpoint	Location (including the local authority)	Co-ordinates and elevation (AOD)	Receptor Type
7	Newton Road (West) Located within the boundary of Wigan Council	360497, 395987 28 m	Residential receptors in Lowton and recreational users of footpaths.
8	Newton Road (East) Located within the boundary of Wigan Council	361842, 396468 25 m	Residential receptors in Lowton and recreational users of footpaths.
9	Kenyon Located within the boundary of Warrington Borough Council	362770, 395171 23 m	Residential receptors in Kenyon and recreational users of paths beside road. This right of way is Warrington route no. 102.
10	Culcheth Heights Located within the boundary of Warrington Borough Council	366325, 393795 41 m	Long range view from publicly accessible area of high ground.
11	Path beside M62 Located within the boundary of Warrington Borough Council	361381, 392030 3m	Long range view from footpath network just north of the M62 motorway. This right of way is Warrington route no. 2.
12	Burtonwood Located within the boundary of Warrington Borough Council	357487, 392579 15 m	Recreational receptors just to the east of Burtonwood. This right of way is Warrington route no. 34.
13	Skylark Hill, Haydock Located within the boundary of St Helens Borough	356583, 396296 64 m	Long range view from publicly accessible area of high ground.

Viewpoint	Location (including the local authority)	Co-ordinates and elevation (AOD)	Receptor Type
	Council		
14	Golborne Located within the boundary of Wigan Council	360250, 397091 31 m	Residential receptors in Golborne and recreational users of paths beside road. The viewpoint is located on a pavement beside the East Lancashire Road (A580).

9.37 The LVIA will include photographs from viewpoints representative of this range of receptors. Photomontages and/ or other visualisations will be prepared from specific key locations to be agreed with St Helens, Wigan and Warrington Councils. All photography and any visualisations will be prepared and presented in accordance with the requirements of Landscape Institute Technical Guidance Note 06/19: Visual Representation of Development Proposals.

9.38 Where new planting, or changes to the management of existing vegetation is proposed as mitigation, visualisations will reflect this. Photomontages will include the following:

- An image showing how the Proposed Development would appear at the start of operations, or ‘Year 0’. Any proposed planting would not have established at this stage and so this typically represents a ‘worst-case scenario’ in terms of operational visibility; and
- An image showing the point at which planting would provide effective mitigation, which is typically taken as 15 years following the opening of the Proposed Development, or ‘Year 15’. Assumed planting heights would be presented in the LVIA, however at Year 15 a reasonable estimate would be 8m for trees, based on a height of 0.5m when planted and an estimated growth rate of 0.5m per year.

Proposed approach to surveys and further baseline data collection

9.39 The following will form part of the process by which a robust landscape and visual baseline is established:

- Further consultation with the local authorities (St Helens, Wigan and Warrington Councils) on specific parts of the baseline, such as viewpoints, and any actions which arise out of the response to this scoping chapter;
- Winter and summer surveys within the DCO Site and study area, including further viewpoint photography in winter and summer. All visual receptors which have potential to be subject to significant visual effects, such as residential properties and footpaths, will be surveyed from publicly accessible locations;

- Further analysis of the local landscape character assessments via site verification.

APPROACH AND METHODOLOGY

Guidance

- 9.40 The methodology and criteria used for the assessment of landscape and visual effects will be based on the non-prescriptive Guidelines for Landscape and Visual Impact Assessment, Third Edition, 2013 (GLVIA3). The GLVIA3 sets out the principles that underpin landscape and visual assessment but does not provide a formulaic recipe for reaching judgements about significance. Such judgements instead rely on reasoned and experienced professional judgement.
- 9.41 The following additional guidance will also inform detailed aspects of the approach taken to the landscape and visual assessment of the Proposed Development:
- Natural England (2014) An Approach to Landscape Character Assessment;
 - The Landscape Institute (2016) Technical Guidance Note 08/15: Landscape Character Assessment;
 - The Landscape Institute (2017) Technical Information Note 01/2017: Tranquillity – An Overview;
 - The Landscape Institute (2019) Technical Guidance Note 06/19: Visual Representation of Development Proposals;
 - The Landscape Institute (2020) Technical Guidance Note 04/2020: Infrastructure; and
 - The Landscape Institute (2021) Technical Guidance Note 02/21: Assessing Landscape Value Outside National Designations.

Structure of the LVIA

- 9.42 The LVIA will comprise:
- The identification of landscape and visual receptors and a description of current baseline conditions;
 - An assessment of the sensitivity of the receptors to change (taking account of both receptor susceptibility and receptor value);
 - An assessment of the potential impacts associated with the Proposed Development, i.e. a description of how the introduction of the Proposed Development will alter the baseline landscape and visual conditions;
 - An assessment of the magnitude of change to the receptors (taking into account the scale, extent, duration and potential reversibility of the change);

- An assessment of the level and significance of the effect on the landscape and visual receptors, based on the assessments of their sensitivity and the magnitude of change that they are subject to;
- Identification of measures to mitigate adverse landscape and visual effects; and
- Report on the residual landscape effects once mitigation has been taken into account.

Approach to Assessment

Receptors

- 9.43 The approach to assessment comprises desktop studies and site surveys. The purpose of the assessment is to establish the nature and extent of potential receptors, to identify the likely sensitivity of receptors, and to record the potential landscape and visual effects of the Proposed Development on the receptors.
- 9.44 The landscape receptors with potential to experience change as a result of the Proposed Development comprise landscape elements (i.e. woodland, individual trees, hedgerow, landform, field pattern, etc) and landscape character. The description of the change to landscape elements caused by the Proposed Development will inform the overall assessment of the significance of the effects on landscape character.
- 9.45 The visual receptors with potential to experience change as a result of the Proposed Development include people in specific locations such as their homes, public areas or places of work with potential to experience views of the Proposed Development. A detailed assessment of effects on representative viewpoints will be provided as an appendix to the ES and will provide an illustration of typical views of the Proposed Development, which will in turn inform an assessment of visual effects on the specific visual receptors within the study area.

Assessment Stages, Seasons and Planting Heights

- 9.46 The assessment of landscape and visual effects will include consideration of the following:
- Seasonal differences with or without the Proposed Development including summer with foliage and winter without foliage.
 - The change to, or loss of, existing landscape elements, e.g. loss of existing trees and hedgerow.
 - Temporary construction activity, e.g. presence of plant, temporary buildings, materials storage, and construction traffic parking and movements.
 - The introduction of infrastructure, such as internal roads, and other associated development, needed to operate and maintain the Proposed Development.
- 9.47 The assessment will consider the effects of the Proposed Development at the following points in time:

- Construction: the assessment of the Construction Phase of the Proposed Development will assume that construction will take place across the whole DCO Site during winter when visibility is greatest and therefore will comprise a 'worst-case' assessment of effects.
- Year 0 of operation: the assessment of the Operational Phase will consider the opening year of the Proposed Development prior to the maturing of any mitigation planting. The visual assessment will consider both winter and summer effects and the description of each effect will include reference to key differences in seasonal effects where applicable. However, the judgement with regards the level and significance of effect on each visual receptor will refer to winter. Visual effects experienced during winter months are considered to be the 'worst-case' in assessment terms as trees are without leaf and visibility tends to be more open.
- Year 15 of operation: the assessment of the Operational Phase will also consider the effects of the Proposed Development once planting has established and increased in maturity. Similar to the Year 0 assessment, reference will be made to visual effects during both summer and winter and the focus of this Year 15 assessment is the extent to which proposed mitigation planting would have established and the subsequent change in effects during both seasons, albeit with the level and significance of effect on each visual receptor assessed as a worst-case during winter.

- 9.48 An Illustrative Landscape Masterplan will be developed to mitigate effects during both summer and winter, albeit it is acknowledged that this tends to be more effective during summer when trees are in leaf.
- 9.49 The landscape assessment will not take into account seasonality, however reference may be made to the seasons where seasonal changes over a calendar year form a distinct part of the landscape character.
- 9.50 All proposed landscape and visual mitigation measures would be implemented by the year of opening, with a mitigation design year of Year 15, which is the timescale by which proposed planting would have established to a point of relative maturity such that it would contribute to mitigation objectives. For the purpose of assessment, mitigation planting growth and height assumptions will be defined in the LVIA.

Study Area

- 9.51 The preliminary study area for the Proposed Development has been established with reference to guidance in GLVIA3 and the ZTV shown in Figure 9.2.
- 9.52 Taking account of the ZTV, the study area for the LVIA extends to 5km from the Proposed Development Boundary. This distance is sufficient for the LVIA given the screening provided in particular by surrounding built form within dense urban settlements such as Warrington, Newton-le-Willows, Golborne and Culcheth. The ZTV illustrated on Figure 9.2 demonstrates that the theoretical visibility of the Proposed Development is suitably contained within a 5km radius, with a likely focus on an area within 2km of the DCO Site in relation to the identification of significant landscape and visual effects.

- 9.53 The study area is 5km in both the landscape and visual assessments, including the cumulative assessment of effects, however this has not been taken as a fixed boundary which cannot be exceeded, and reference will be made to receptors beyond 5km if necessary.

Assessment Criteria

- 9.54 A detailed methodology will be included as an appendix to the LVIA which will set out the approach taken to the assessment of landscape and visual effects and how conclusions have been reached regarding the level and significance of effects.
- 9.55 The level and significance of landscape effect will be determined by combining the sensitivity of the affected landscape with the magnitude of change associated with the introduction of the Proposed Development. The evaluation of the sensitivity of the landscape resource will be based on factors and attributes which affect the susceptibility of the landscape to change and its value. Magnitude of change to a landscape receptor due to the Proposed Development, typically a landscape character area, will be assessed in terms of its size or scale, the geographical extent of the area influenced, its duration and its reversibility.
- 9.56 The level and significance of visual effect will be determined by combining the sensitivity of the visual receptor with the magnitude of change associated with the introduction of the Proposed Development. The visual sensitivity of individual receptors depends upon the susceptibility of the specific receptor type to change, and the value attributed to the view. Magnitude of change to a view experienced by a visual receptor, due to the Proposed Development, is assessed in terms of its size or scale, the geographical extent of the area influenced, its duration and its reversibility.
- 9.57 Qualitative judgements used in landscape and visual impact assessment will include reference to evidence to support any professional judgements that have been made, including how thresholds in significance have been determined. In addition, a judgement will be made as to whether the level of effect is considered to be adverse or beneficial.
- 9.58 The assessment of the level and significance of residual effects will take into consideration mitigation measures implemented as part of the Proposed Development.

PRELIMINARY ASSESSMENT OF POTENTIAL EFFECTS

- 9.59 This section sets out the potential significant landscape and visual effects that could arise at construction and operation due to the Proposed Development.

Construction Effects

- 9.60 During the construction of the Proposed Development, potentially significant landscape and visual effects are likely to arise as a result of:
- Temporary activities associated with the construction of the Proposed Development, including any additional temporary land take, construction operations, and the temporary presence of construction plant equipment and fencing, all of which could affect the character of the landscape and people's visual amenity; and

- Direct changes to the physical landscape fabric of the DCO Site from changes in landform (i.e. earthworks), or the removal of vegetation.

9.61 The assessment of landscape effects at the construction phase is proposed to be scoped into the ES. Landscape receptors are defined in the subsequent Operational Effects section and the construction assessment would be consistent in considering effects on them.

9.62 As there are no statutory or non-statutory designated landscapes within the study area, it is proposed that effects on designated landscapes are scoped out of the construction phase assessment.

9.63 The assessment of visual effects at the construction phase is proposed to be scoped into the ES. Visual receptors are defined in the subsequent Operational Effects section and the construction assessment would be consistent in considering effects on them.

Operational Effects

9.64 Once the Proposed Development is completed and operational, potentially significant landscape and visual effects are likely to arise as a result of:

- The influence of the Proposed Development upon the landscape character of the DCO Site and surrounding landscape, with potential changes in the characteristics of the character areas; and
- Views of the Proposed Development from the surrounding area, affecting the visual amenity of local residents in their properties, users of the public rights of way network (especially where routes run through the DCO Site), and road users.

9.65 The assessment of landscape effects at the operational phase is proposed to be scoped in to the ES and will include:

- Effects on the DCO Site Features / Landscape Fabric; and
- Effects on Local Landscape Character Areas.

9.66 It is proposed that National Character Areas (NCAs) are summarised in the LVIA as part of the baseline description, however, effects on the NCAs would be scoped out of the ES in favour of an assessment at the local level. This is because the local level is a more appropriate scale for assessment and have been identified relatively recently. The overall assessment of effects on landscape character would therefore still be appropriate and proportionate.

9.67 The assessment of change to landscape features within the DCO Site will be recorded in the LVIA, however this will inform the levels of effect on landscape character areas, i.e. while the change will be recorded, such as a length of hedgerow to be removed, levels of effect will not be attributed to individual landscape features, such as hedgerow, trees and landform.

9.68 As with the construction phase, the effects on NCAs are proposed to be scoped out of the ES.

9.69 As with the construction phase, the effects on designated landscapes are proposed to be

scoped out of the operational phase assessment.

9.70 The assessment of visual effects at the operational phase is proposed to be scoped into the ES. The receptors that have the potential to experience significant visual effects during construction are:

- Residents of individual properties located in close proximity to the DCO Site;
- Residents of small villages located to the east of the DCO Site, i.e.
- Users of local footpaths, including those which cross the DCO Site currently;
- Road users; and
- People working in the area at commercial premises.

9.71 It is unlikely that users of the nearby major transport routes would be subject to notable adverse effects due to the Proposed Development, and will be scoped out of the visual assessment. These comprise: car users on the M6 and M62 motorways; and rail passengers on the Liverpool-Manchester railway line, which is in cutting as it passes the DCO Site and as such would be unlikely to afford views up towards the Proposed Development.

Residential Visual Amenity Assessment

9.72 The Scheme will be designed to provide suitable offsets and/or visual screening from the properties located in close proximity to the DCO Site and it is considered unlikely at this stage that any residential receptors would exceed the threshold of acceptability for residential visual amenity as outlined in the Landscape Institute's TGN 02/2019. However, in advance of submission of the application for development consent, the applicant will provide a Residential Visual Amenity Assessment (RVAA), which will be appended to the LVIA chapter of the ES if required.

Night Time Assessment

9.73 The Proposed Development would require a lighting scheme, including security lighting on buildings and internal road lighting, all of which would be operated outside of daylight hours. Given that night-time visual effects could arise, an assessment of night-time landscape and visual effects is therefore proposed to be scoped into the ES and will be appended to the LVIA.

9.74 Lighting required during the construction phase may be considered in the LVIA, however the focus on night-time effects would be on the long-term operational phase.

PROPOSED AVOIDANCE AND MITIGATION MEASURES

Construction

9.75 It is anticipated that construction activities would be controlled via a Construction Environmental Management Plan (CEMP). Compliance with the CEMP would be secured through a requirement in the DCO. Measures that could be included within the CEMP to

reduce adverse landscape and visual effects include:

- Measures to protect existing vegetation which is identified for retention;
- Measures to limit the effects of any temporary construction lighting upon the amenity of local residents;
- Protocols governing the establishment of temporary contractor compounds, again to limit any effects upon the amenity of local residents; and
- Measures to retain the amenity of users of the public rights of ways running through the DCO Site where appropriate, including where practical measures to screen views from retained sections of routes, and from any diverted sections of routes.

Operation

9.76 A series of measures would be embedded into the design of the Proposed Development in order to reduce or eliminate potential adverse landscape and visual effects. These are likely to include:

- Influence on the design of the layout and scale of the proposed buildings, ancillary structures and layout in order to reduce visual prominence. This may include ‘zoning’ of different heights of buildings in response to the findings of the LVIA; and
- Provision of new planting, and/or changes to the management of existing vegetation in order to reduce visibility, to improve landscape character, and to enhance green infrastructure.
- In some cases, proposed landscape and visual mitigation may dovetail with mitigation proposed in relation to other disciplines. For example, proposed planting may also provide ecological mitigation.

9.77 An Illustrative Landscape Masterplan will be developed to illustrate the approach to mitigate landscape and visual effects and also mitigation proposed by other disciplines, such as ecology, noise, heritage and hydrology.

9.78 To ensure the long-term effectiveness of mitigation, it is anticipated that a Landscape and Ecology Management Plan (LEMP) would be developed in agreement with key stakeholders. This would set out the aims and objectives of landscape mitigation and ecological mitigation, details of how this mitigation would be implemented, and would also set out how this would be managed by the Applicant over the lifespan of the Proposed Development.

UNCERTAINTIES

9.79 The conclusions of the LVIA will be informed by a series of field visits. The dates of these visits will be dictated by project timescales. As such, initial ‘in the field’ conclusions regarding visibility will reflect the level of deciduous foliage present at the time of the visits. Viewpoint photography will also reflect the level of foliage present at the time photography is taken. Where relevant to its conclusions, the LVIA will set out assumptions made as to the likely

seasonal change in the visibility of the Proposed Development. Summer and winter photography will be provided with the LVIA as far as is practicable.

- 9.80 All viewpoint photography will be from publicly accessible locations, and not from private property or residences. The assessor’s professional judgement will be used to assess the impacts on residents’ views, informed by site work and aerial photography.

SUMMARY OF PROPOSED EIA SCOPE

Table 9.4 Summary of landscape and visual impacts proposed to be scoped in and out of the EIA

Impacts	Scoped in or out?	Justification
Construction and Operation (Years 0 and 15)		
Effects on landscape features/landscape fabric within the DCO Site	Scoped in	<p>The Proposed Development will result in physical change to the DCO Site during construction, which has potential to result in significant landscape and visual effects.</p> <p>A description of change to landscape features, such as landform and vegetation cover, will be provided which will inform the assessment of effects on landscape character and views, i.e. levels of effect will not be attributed to individual landscape features.</p>
Statutory Designated Landscapes	Scoped out	There are no statutory designated landscapes within 5km of the Proposed Development.
Non-Statutory Designated Landscapes	Scoped out	There are no non-statutory designated landscapes in proximity to the Proposed Development with the potential to be significantly affected.

Impacts	Scoped in or out?	Justification
Effects on National Character Areas	Scoped out	National Character Areas will be described in the LVIA to provide context to the landscape baseline, however the appropriate scale to assess the landscape effects of the Proposed Development is at a local level as it will provide a more detailed description of the landscape baseline.
Effects on Local Character Areas	Scoped in	Effects on local character areas will form the focus of the landscape assessment as there is potential for significant landscape effects during construction and operation.
Visual effects	Scoped in	The construction and operation of the Proposed Development will be visible from parts of the Study Area and there is potential for significant effects to occur on people’s views.
Night Time Effects (Lighting)	Scoped in	A Lighting Assessment will be appended to the LVIA and a summary of potential night time effects will be included within the LVIA chapter.

Chapter 10 ◆ Ecology and Biodiversity

INTRODUCTION

- 10.1 This chapter outlines the scope and methodology for the assessment of the likely significant effects arising from the Proposed Development, as described in Chapter 3: The Proposed Development, in respect to ecology and biodiversity.
- 10.2 It sets out ecological and biodiversity receptors of relevance, and the approach to the baseline data gathering and assessment of the Proposed Development's impacts during construction and operation.
- 10.3 The following aspects have been considered as part of the scope and methodology for biodiversity:
- Internationally, nationally and locally designated statutory/non-statutory sites;
 - Priority and non-priority habitats; and
 - Protected and notable species groups.
- 10.4 In line with the EIA Regulations, this Scoping Report chapter has been compiled by appropriately qualified, experienced, and competent experts. The author of this chapter is David Paton MEnvSci QCIEEM, an ecological consultant at Tyler Grange. This chapter has been reviewed and approved by Joseph Dance BSc (Hons) MCIEEM, Regional Ecology Director at Tyler Grange.

RELEVANT LAW, POLICY AND GUIDANCE

- 10.5 The DCO will be assessed against the Infrastructure Planning (Decisions) Regulations 2010 and National Networks National Policy Statement ('NPSNN', adopted 2024). The National Planning Policy Framework ('NPPF', 2023) and relevant local planning policy are material considerations.

Legislation

The Environment Act 2021

- 10.6 The Environment Act gained Royal Assent in November 2022. Whilst the premise of Biodiversity Net Gain (BNG) has been around prior to this, the Assent of the Act sets the Framework for future legislation to be changed. These changes were legally adopted as part of Schedule 14 of the Town and Country Planning Act for all major planning applications in February 2024 and further applied to 'small' sites in April 2024. It is expected that these

changes will apply to Nationally Significant Infrastructure Projects in November 2025, but the National Policy Statement on NSIPs discusses BNG outside of the 'mandatory' Environment Act framework.

The Wildlife and Countryside Act (WCA) 1981 (as amended)

10.7 In Britain, the WCA 1981 (as amended) is the primary legislation protecting habitats and species. SSSIs, representing the best examples of our natural heritage, are notified under the WCA 1981 (as amended) by reason of their flora, fauna, geology or other features. All breeding birds, their nests, eggs and young are protected under the Act, which makes it illegal to knowingly destroy or disturb the nest site during nesting season. Schedules 1, 5 and 8 afford protection to individual birds, other animals and plants.

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

10.8 The European Council Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna, 1992, often referred to as the 'Habitats Directive', provides for the protection of key habitats and species considered of European importance. Annexes II and IV of the Directive list all species considered of community interest. The legal framework to protect the species covered by the Habitats Directive has been enacted under UK law through The Conservation of Habitats and Species Regulations 2017 (as amended).

The Countryside and Rights of Way (CRoW) Act 2000

10.9 The CRoW Act 2000 strengthens the species enforcement provisions of the WCA 1981 (as amended) and makes it an offence to 'recklessly' disturb a protected animal whilst it is using a place of rest or shelter or breeding/nest site.

The Natural Environment and Rural Communities Act (NERC) 2006

10.10 Provides a list of habitats and species of principal importance for the conservation of biodiversity.

The Hedgerow Regulations 1997

10.11 The Hedgerows Regulations 1997 were introduced in England and Wales to protect important hedgerows. They require landowners to notify the local planning authority before removing or damaging any hedgerow that meets certain criteria. If the local planning authority determines that the hedgerow is important, they can issue a retention notice, prohibiting its removal.

10.12 The regulations apply to most countryside hedgerows, but do not affect hedges in domestic gardens. They aim to preserve hedgerows for their ecological benefits, such as providing habitat for wildlife and helping to prevent soil erosion.

The Protection of Badgers Act 1992

10.13 The Protection of Badgers Act 1992 was introduced in the UK to protect badgers and their setts. It makes it illegal to intentionally kill, injure, or capture a badger, or to damage or

destroy a badger sett. The Act also prohibits the disturbance of badgers while they are in their setts.

- 10.14 The Act aims to conserve badger populations and protect their habitats. It is a criminal offense to violate the provisions of the Act, and offenders can face fines or imprisonment.

The Animal Welfare Act 2006

- 10.15 The Animal Welfare Act 2006 is the principal law relating to animal welfare, protecting all vertebrate animals. The act aims to enforce a duty of care to owned animals, and prohibits forms of animal cruelty including causing unnecessary suffering, mutilation, and poisoning.

Policy

- 10.16 The DCO Proposal will primarily be assessed against the National Policy Statement for National Networks (NPSNN) and the National Planning Policy Framework (NPPF), with material considerations toward the statutory development plans of all relevant local authorities.

National Networks – National Policy Statement (the NPSNN) (March 2024)

- 10.17 The NPSNN sets out the need for, and government’s policies to deliver, development of Nationally Significant Infrastructure Projects (NSIPs) on the national road and rail networks in England. The NPSNN is the primary basis for the Secretary of State for making decisions on development consent applications for Nationally Significant Infrastructure Projects (NSIPs) in England.
- 10.18 Within the NPSNN, Biodiversity is discussed within Sections 4 and 5. These sections discuss how Biodiversity Net Gain (BNG) should be applied in conjunction with the mitigation hierarchy, and does not change or replace existing environmental obligations. Applicants should also identify and deliver appropriate opportunities for nature recovery and wider environmental enhancements. For NSIPs, a government Biodiversity Net Gain statement will set out the concept and policy requirements for BNG – when these provisions are commenced for NSIPs (expected to be November 2025), the Secretary of State will need to be satisfied that the biodiversity gain objective in any relevant Biodiversity Gain Statement has been met.
- 10.19 Paragraph 5.47 of the NPSNN also states how the applicant should show how their proposal will deliver biodiversity net gain in line with the requirements in a Biodiversity Gain Statement.

National Planning Policy Framework (NPPF), December 2023

- 10.20 The updated National Planning Policy Framework (NPPF) was published in December 2023 and sets out the Government's planning policies for England and how these should be applied. Section 15 of the NPPF discusses biodiversity matters, which are summarised as ensuring planning decisions contribute to enhancing the natural and local environment by minimising impacts on and providing net gains for biodiversity, along with avoiding impacts in the first instance.

St Helens Borough Local Plan up to 2037

10.21 Planning document that sets out the framework for the growth and development of the Borough. It identifies how and where new development and regeneration should take place and thereby promotes and manages the future development of the Borough.

10.22 Relevant planning policies from the Statutory Development Plan include:

- Policy LPC06 - Biodiversity and Geological Conservation
- Policy LPC07 - Greenways
- Policy LPC08 - Ecological Networks
- Policy LPC10 - Trees and Woodland
- Policy LPA02 - Development Principles
- Policy LPA08 - Green Infrastructure

10.23 Relevant supplementary planning guidance includes:

- Trees and Development SPD
- Biodiversity SPD (June 2011)

Wigan Local Plan Core Strategy 2013

10.24 Planning document that sets the framework for an Allocations and Development Management Local Plan. Sets out detailed planning policies, designate areas and allocate land for development.

10.25 Relevant planning policies from the Unitary Development Plan include:

- Policy EV2C - Features of Major Importance to Nature Conservation and Wildlife Corridors.

10.26 Relevant planning policies from the Core Strategy include:

- Policy CP17 Environmental Protection.

10.27 Relevant planning policies from Places for Everyone (adopted March 2024) include:

- Policy JP-P1 Sustainable Places
- Policy JP-G8 A Net Enhancement of Biodiversity and Geodiversity

Warrington Local Plan 2021/22

10.28 Planning document that provides the statutory planning framework for the entire Borough

for the period 2021/22 to 2038/39. Used to guide decisions on planning applications and to identify areas where investment and growth should be prioritised.

10.29 Relevant planning policies from the Core Strategy include:

- Policy DC3 Green Infrastructure
- Policy DC4 Ecological Network
- Policy ENV8 Environmental and Amenity Protection

Standards and Guidance

10.30 The below table summarises the relevant standards and guidance to the ecological assessment of the Proposed Development.

Table 10.1 Table summarising standards and guidance of relevance to the assessment.

Standards and Legislation	Relevance to Assessment
<p><i>Ecological Impact Assessment (EclA)</i></p> <p>Guidelines for Preliminary Ecological Appraisal, 2nd edition (2017). Chartered Institute of Ecology and Environmental Management (CIEEM)</p> <p>CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management, Winchester.</p>	<p>The guidelines provide a structured approach for identifying and assessing potential ecological impacts of development projects.</p>
<p><i>Habitats</i></p> <p>Joint Nature Conservation Committee (2010). Handbook for Phase 1 habitat survey - a technique for environmental audit. JNCC, Peterborough</p> <p>Butcher, B., Carey, P., Edmons, R., Norton, L. and Treweek, J. (2020). UK Habitat Classification – Habitat Definitions</p>	<p>These guidelines provide a resource for conducting ecological assessments and environmental audits. It provides a standardised methodology for identifying and classifying habitats in the UK.</p>
<p><i>Amphibians</i></p> <p>English Nature (2001). Great Crested Newt Mitigation Guidelines. English Nature, Peterborough.</p> <p>Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000).</p>	<p>These resources provide guidance for developers and landowners on how to minimise the impact of their projects on Great</p>

Standards and Legislation	Relevance to Assessment
<p>Evaluating the suitability of habitat for the Great Crested Newt (<i>Triturus cristatus</i>). Herpetological Journal 10(4), 143-155.</p> <p>ARG UK (2010) ARG UK Advice Note 5, Great Crested Newt Habitat Suitability. Available at: https://www.arguk.org/info-advice/advice-notes/9-great-crested-newt-habitat-suitability-index-arg-advice-note-5/file</p> <p>NatureMetrics (2023) GCN eDNA testing. Available at: https://www.naturemetrics.com/wildlife-services/gcn-edna/</p> <p>Biggs J, Ewald N, Valentini A, Gaboriaud C, Griffiths RA, Foster J, Wilkinson J, Arnett A, Williams P and Dunn F (2014). Analytical and methodological development for improved surveillance of the Great Crested Newt. Appendix 5. Technical advice note for field and laboratory sampling of great crested newt <i>Triturus cristatus</i> environmental DNA. Freshwater Habitats Trust, Oxford.</p>	<p>Crested Newt populations. The provide a standardised methodology for amphibian surveys and provide advice on best practices for Great Crested Newt conservation, including habitat management and monitoring.</p>
<p>Badgers</p> <p>Harris S., Cresswell, P., Jefferies, D. (1989) Surveying Badgers. The Mammal Society, London.</p> <p>Wilson, G., Harris, S., McLaren, G. (1997) Changes in the British badger population 1988 to 1997. People’s Trust for Endangered Species, London.</p> <p>Cresswell, P., S. Harris, D. J. Jefferies (1990) The history, distribution, status and habitat requirements of the badger in Britain. Nature Conservancy Council, Peterborough, England.</p> <p>Natural England (2022) Badgers: surveys and mitigation for development projects, Natural England standing advice, Available at: https://www.gov.uk/guidance/badgers-surveys-and-mitigation-for-development-projects</p> <p>Andrews, R. (2013). The Classification of Badger (<i>Meles meles</i>) Setts in the UK: A Review and Guidance for Surveyors. Chartered Institute of Ecology and Environmental Management - In Practice 82: 27-31</p> <p>McDonald, P. J., Allen, T. P (2011) Provision of artificial badger setts and use of remote camera monitoring to determine Eurasian badger <i>Meles meles</i> sett occupancy, Suffolk, England.</p>	<p>These resources provide a comprehensive overview of badger surveying and mitigation practices in the UK, including legal requirements and best practices for badger surveys in the context of development projects.</p>

Standards and Legislation	Relevance to Assessment
<p>Conservation Evidence 8, 107-110</p>	
<p>Bats</p> <p>Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Chartered Institute of Ecology and Environmental Management, Ampfield.</p> <p>Mitchell-Jones, A.J, & McLeish, A.P. (eds). (2004) 3rd Edition Bat Workers' Manual., JNCC, Peterborough, ISBN 1 86107 558 8</p> <p>Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). The Bat Conservation Trust, London. ISBN-978-1-7395126-0-6</p> <p>Collins, J. (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines. 3rd edition. Bat Conservation Trust, London.</p> <p>Bat Tree Habitat Key (2018) Bat Roosts in Trees: a guide for identification and assessment for tree-care and ecology professionals. Pelagic Publishing, Exeter.</p>	<p>These guidelines provide comprehensive information on bat surveys, mitigation, and habitat assessment in the UK.</p>
<p>Birds</p> <p>Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. (2021) The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. British Birds 114: 723-747</p> <p>Bibby, C.J., Burgess, N.D., Hill, D.A. and Mustoe, S.H. (2000) Bird census techniques. Academic Press, London.</p> <p>Gilbert, G., Gibbons, D.W., & Evans, J. (1998) Bird Monitoring Methods: A Manual of Techniques for UK Key Species. The Royal Society for the protection of Birds, Sandy, Bedfordshire, England.</p> <p>Bird Survey & Assessment Steering Group. (2023). Bird Survey Guidelines for assessing ecological impacts, v.1.1.0. Available at: https://birdsurveyguidelines.org</p>	<p>These resources provide information on bird populations, census techniques, and survey methodologies in the UK.</p>

Standards and Legislation	Relevance to Assessment
<p>Otter</p> <p>Garcia de Leaniz, C., Forman, D. (2006) Non-intrusive monitoring of otters <i>Lutra lutra</i> using infrared technology. <i>Journal of Zoology</i> 270(4):577-584.</p> <p>Natural England standing advice on otters at https://www.gov.uk/guidance/otters-advice-for-making-planning-decisions</p> <p>Kruuk, H., Carss, D.N., Conroy, J.W.H. and Durbin, L. (1993). Otter (<i>Lutra lutra</i>) Numbers and Fish Productivity in Rivers in North East Scotland. <i>Symposium of the Zoological Society</i>, 65, 171-191.</p> <p>Chanin P (2003). Monitoring the Otter <i>Lutra lutra</i>. <i>Conserving Natura 2000 Rivers Monitoring Series No. 10</i>, English Nature, Peterborough.</p> <p>Findlay, M. A., Briers, R. A. & White, P. J. C. (2020) Component processes of detection probability in camera-trap studies: understanding the occurrence of false-negatives. <i>Mammal Research</i>, 65, 167–180.</p>	<p>These resources offer a range of information on otter ecology, survey methods, and conservation practices in the UK.</p>
<p>Reptiles</p> <p>Froglife (1999) Reptile Survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation. <i>Froglife Advice sheet 10</i>. Froglife, Halesworth.</p> <p>Natural England (2022) Reptiles: advice for making planning decisions. Available at: https://www.gov.uk/guidance/reptiles-advice-for-making-planning-decisions#:~:text=This%20is%20Natural%20England's%20standing,standing%20advice%20for%20protected%20species.</p>	<p>These resources provide information on conducting reptile surveys and making planning decisions related to reptiles in the UK.</p>
<p>Water Vole</p> <p>Dean, M., Strachan, R., Gow, D. and Andrews, R. (2016) <i>The Water Vole Mitigation Handbook (Mammal Society Mitigation Guidance Series)</i>. Mammal Society, London.</p> <p>Dean, M. (2021) <i>Water Vole Field Signs and Habitat Assessment A Practical Guide to Water Vole Surveys</i>. Pelagic Publishing, London</p>	<p>These resources provide information on water vole surveys, mitigation, and conservation in the UK.</p>

Standards and Legislation	Relevance to Assessment
Strachan, R., Moorhouse, T. and Gelling, M. (2011) Water Vole Conservation Handbook. Third Edition. Wildlife Conservation Research Unit, Oxford	

CONSULTATION TO DATE

10.31 To date, the following stakeholders have been consulted and part of preparing this EIA Scoping Report chapter:

- Natural England – Initial consultation meeting held to introduce the DCO Site held on 25th June 2024.

10.32 Key issues discussed include:

- Largely, the meeting was a platform to introduce the DCO Site to representatives of Natural England, provide context and information regarding the Proposed Development, and demonstrate a commitment to addressing ecological and biodiversity factors arising as a result of the development.
- The presence of Highfield Moss Site of Special Scientific Interest (SSSI), which is situated directly adjacent to the northern area of the DCO Site, just south of the existing rail corridor. The Proposed Development will provide a buffer area between the SSSI and built development, and take steps to implement pollution control measures (largely relating to drainage/water runoff) so as not to impact the SSSI. The precise scope of mitigation and buffer is to be discussed with Natural England via their Discretionary Advice Service (DAS).

10.33 Informal consultation is planned for the duration of the DCO application process, which will introduce the Proposed Development and invite feedback from both statutory and non-statutory stakeholders on the proposals. The consultation will be held between the relevant authorities and their statutory ecological consultees – in this context this will be Merseyside Environmental Advisory Service (MEAS) on behalf of St Helens Council and Greater Manchester Ecology Unit (GMEU) on behalf of Wigan Council given the location of the Proposed Development spans both jurisdictions. Natural England will also be a consultee in this process, done alongside the separate DAS process to refine the scope of assessment and mitigation regarding Highfield Moss SSSI.

10.34 Consultation and engagement will be undertaken during the pre-application process with the consultees listed above. Feedback will be considered through the ongoing development of the design and EIA process during the EIA stage.

BASELINE CONDITIONS AND MAIN ISSUES

Baseline environment

10.35 The following section summarises the baseline environment of the DCO Site, determined using the results of surveys detailed below.

Habitats

10.36 The DCO Site is located on the eastern extent of Newton-le-Willows in a flat, agricultural landscape. The DCO Site is located on land to the north of Junction 22 of the M6, spanning east and west of Parkside Road (A573), with the Western Rail Chord extending west of the M6. The land contained within the Draft Order Limits comprises predominantly arable land, with areas of broad-leaved woodland, semi-improved grassland, bare ground, native hedgerow, lines of trees, scattered broad-leaved trees, hardstanding and built form. See Figure 10.1 for habitat locations/areas.

10.37 Significant volumes of Himalayan balsam (invasive non-native species), is noted to be present along Parkside Road, and making up a portion of the understorey in the eastern area of the woodland on the DCO Site.

Species

10.38 Initial ecological studies confirm that:

- The DCO Site is used by a typical assemblage of farmland bird species both breeding and non-breeding, some of which are of conservation concern (RSPB/BTO – Birds of Conservation Concern) including skylark *Alauda arvensis*, yellow wagtail *Motacilla flava* and yellowhammer *Emberiza citronella* (Red List – Birds of Conservation Concern).
- eDNA surveys of 2 of the 9 off-site ponds in 2023 and 2024 confirmed the likely absence of GCN in those ponds. Two ponds are present on the DCO Site (although these are outside the study area available in the 2024 period and have thus not been surveyed in full). In addition, a newly created drainage feature associated with the constructed Parkside Link Road is present on the DCO Site, as identified in Figure 10.1.
- Bat activity surveys and static deployments confirm the presence of the following bat species: common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, noctule bat *Nyctalus noctula*, Myotis species *Myotis*, and brown long-eared bat *Plecotus auritus*. This assemblage bat species is considered to be typical of the surrounding landscape, comprising common and widespread species.
- No badger setts have been identified within the current draft Order Limits, although an active outlier sett exists within an area of woodland associated with Highfield Moss SSSI situated to the north of the DCO Site.

Designated Sites

10.39 A 10km zone around the DCO Site has been used as the study area for considering impacts on

internationally designated sites, which is the typical distance used when considering impacts on such designations. Two internationally designated sites considered to be of international ecological importance are present within 10km of the DCO Site. Manchester Mosses SAC is situated 5.40km south-east of the DCO Site, and Rixton Clay Pits SAC is situated 7.58km south-east of the DCO Site. Given the proximity of the DCO Site to both of these SACs, a Stage 1 Habitat Regulations Assessment (HRA) screening report will be completed as part of the HRA process to confirm potential impact pathways on the SACs. Where likely significant effects cannot be ruled out, a Stage 2 Appropriate Assessment will be undertaken as part of the overall Habitat Regulations Assessment.

- 10.40 Rixton Clay Pits SAC is designated for its internationally important population of GCN. However, given the distance between the DCO Site and the SAC, the GCN populations associated with the SAC are separated from the DCO Site and would not be affected. No other impact pathways are anticipated on this SAC and this will be confirmed as part of a Stage 1 Habitat Regulations Assessment screening report.
- 10.41 A 2km zone around the DCO Site has been used as the study area for considering impacts on nationally designated sites. Highfield Moss SSSI is situated immediately adjacent to the north-eastern boundary of the DCO Site and is of close enough proximity for potential impacts on this designated site to arise from the Proposed Development.
- 10.42 A number of Sites of Biological Interest (SBI) and Local Wildlife Sites (LWS), of county importance are located both adjacent and within 2km of the DCO Site. 2km has been used as the study area when assessing impacts on non-statutory sites. These are:
- Highfield Moss SBI (immediately adjacent to north of the DCO Site)
 - Newton Lake and southern woodland LWS (0.42km north-west)
 - Willow Park LWS (0.44km north-west)
 - Gallows Croft LWS (0.56km south-west)
 - Newton Brook LWS (0.63km south-west)
 - Mesnes Park and Stream LWS (0.69km north-west)
 - Castle Hill LWS (0.76km north-west)
 - Haughton Green Pool LWS (1.16km south-east)
 - Woodland east of Wargrave Road LWS (1.18km west)
 - Ellam's Brook LWS (1.62km north-west)
 - Old Hey Wood LWS (1.70km west)
 - Red Brow Wood LWS (1.86km west)

- Collingwood Road, openspace LWS (1.88km west)
- Fox Covert LWS (1.90km north-west)
- Haydock Park Woodlands LWS (1.92km north-west)
- Mucky Mountains LWS (1.94km west)
- Croft Grasslands LWS (1.98km south-east)
- Sankey Brook LWS (2.0km west)

10.43 The following desktop sources have been used to inform the existing baseline conditions of the study area:

- Multi-Agency Geographic Information for the countryside (MAGIC) website¹;
- Greater Manchester Local Record Centre (GMLRC)²;
- Merseyside Biobank Local Record Centre³;
- RECORD Local Environmental Records Centre⁴;
- Warrington Borough Council website⁵;
- Wigan Council website⁶;
- St Helens Local Council Website⁷;
- Liverpool City Council Website⁸;
- Greater Manchester City Council website⁹;
- Joint Nature Conservation Committee (JNCC) website¹⁰;
- Natural England (NE) designated sites website¹¹;
- Ordnance Survey mapping; and

¹ Accessed September 2024 <https://magic.defra.gov.uk/MagicMap.aspx>

² Accessed September 2024 <https://gmlrc.org/>

³ Accessed September 2024 <https://merseysidebiobank.org.uk/>

⁴ Accessed September 2024 <https://record-lrc.co.uk/>

⁵ Accessed September 2024 <https://www.warrington.gov.uk/>

⁶ Accessed September 2024 <https://www.wigan.gov.uk/index.aspx>

⁷ Accessed September 2024 <https://www.sthelens.gov.uk/>

⁸ Accessed September 2024 <https://liverpool.gov.uk/>

⁹ Accessed September 2024 <https://www.manchester.gov.uk/>

¹⁰ Accessed September 2024 <https://jncc.gov.uk/>

¹¹ Accessed September 2024 <https://designatedsites.naturalengland.org.uk/>

- Google Maps, including aerial photography.

Baseline Surveys

10.44 The following surveys have been completed across areas of the DCO Site which have been accessible at the time of writing (see Figure 10.1 for summary/location of areas covered by existing surveys):

- UK Habitat Classification / Phase I ecological walkover (August 2024);
- Badger survey (August 2024);
- Bats – activity surveys (April-October 2024);
- Bats – static detector deployments (April-October 2024);
- Great Crested Newt eDNA surveys of off-site ponds (June 2024);
- Breeding Bird surveys (April-July 2024); and
- Wintering Bird surveys (October 2023-March 2024).

10.45 Based on the habitats recorded within the baseline surveys to date and the desktop study results, the DCO Site has the potential to support the following species/species groups:

- Amphibians including great crested newt, smooth newt *Lissotriton vulgaris*, palmate newt *Lissotriton helveticus*, common frog *Rana temporaria* and common toad *Bufo bufo*. There is no habitat within the DCO Site or adjacent to it to support any other species of amphibian;
- Badgers;
- Bats;
- Birds (breeding and non-breeding); and
- Hedgehog.

Species scoped out

10.46 The habitats within the DCO Site are primarily arable and do not contain any aquatic habitat within the DCO Site or within such proximity to be affected to support water vole or otter. Similarly, the agricultural nature of the DCO Site provides no suitable habitat for reptiles so this species group is also considered to be scoped out of further assessment.

Proposed approach to surveys and further baseline data collection

10.47 The following surveys are planned to be undertaken across the entirety of the draft Order Limits and Highfield Moss SSSI (where relevant and agreed with Natural England), and will

inform the design development process for the Proposed Development and the EIA:

- Badger survey (2025);
- Bats – activity surveys (2025);
- Bats – static detector deployments (2025);
- Bats – ground level tree assessments (2025);
- Bats – aerial tree inspection of any trees to be either directly or indirectly affected and with bat roost potential (2025)
- Bats – emergence of structures (buildings/bridges) to be directly or indirectly affected and with bat roost potential (2025)
- Great Crested Newt eDNA surveys of off-site ponds (2025);
- Breeding Bird surveys (2025); and
- Wintering Bird surveys (2024-2025).

APPROACH AND METHODOLOGY

Assessment and Reports

Desk Study

10.48 A desk-based study has been conducted whereby records of designated sites and records of protected and priority species have been purchased and interrogated for the DCO Site and the surrounding landscape. This process has identified the presence of protected sites and protected/notable fauna and flora in the surrounding landscape. The data returned from this exercise has informed the scope of this assessment and is referenced throughout this assessment where relevant. Further investigations will be undertaken as the DCO process progresses, which may require additional interrogation with regards to the designated features of the nearby non-statutory designated sites, to confirm potential impact pathways. The aim of the data search is to collate existing ecological records for the DCO Site and adjacent areas to inform the scope of survey effort and potential impacts on protected/notable species.

Biodiversity Net Gain (BNG)

10.49 Current guidance is that demonstrating a 10% net gain in biodiversity value (reported by Defra's Statutory Biodiversity Metric) for NSIPs will not be mandatory until November 2025, although this is not confirmed at the point of the preparation of this scoping document. Nevertheless, existing current local and national policy requires the demonstration of a 'no net loss' scenario and to secure net gains for biodiversity. Consequently, the Proposed Development will be assessed against Defra's Statutory Biodiversity Metric to demonstrate compliance with existing policy and commit to a 10% net gain, taking into account the

principles established in the NPSNN on NSIPs even if they are not mandatory via The Environment Act at the point of submission.

Evaluation

- 10.50 The evaluation of habitats and species is defined in accordance with published guidance¹². The scale of importance of each ecological feature is assigned within a defined geographical context, namely international and European, national, regional, county, and local. Below these are features considered to be of negligible importance.
- 10.51 Consideration will also be given to legally protected or controlled species which are ‘important features’ in the context of this assessment, for which mitigation measures are required to ensure legal compliance, regardless of their geographic scale of importance. Thus, it is possible for a feature of negligible ecological importance to be legally protected and hence require mitigation.
- 10.52 Evaluation is based on various characteristics that can be used to identify ecological features likely to be important in terms of biodiversity. These include site designations (such as SSSIs, or for undesignated features, the size, conservation status (locally, nationally or internationally), and the quality of the ecological feature. In terms of the latter, quality can refer to habitats (for instance if they are particularly diverse, or a good example of a specific habitat type), other features (such as wildlife corridors or mosaics of habitats) or species populations or assemblages.

Impact Assessment

- 10.53 The assessment of impacts arising from the Proposed Development will be undertaken in accordance with CIEEM’s Ecological Impact Assessment Guidelines¹², taking into account the type/duration of impact and the importance of the ecological receptor in question.

Ecological Surveys

UK Habs / Extended Phase 1 Habitat Survey Walkover

- 10.54 Much of the draft Order Limits have already been subject to a UK Habitat Classification survey and this will be extended to the entirety of the draft Order Limits prior to statutory consultation and submission of the Environmental Statement. Although largely superseded by the UK Habitat Classification survey, the principles of ‘extended’ phase 1 habitat surveys will also be employed. The ‘extended’ part of the survey (which UK Habitat Classification does not do) assesses the suitability of habitats for protected/notable species. The desk study data and existing habitat/species survey data obtained has already allowed an assessment of the potential presence of protected/notable species in the current parts of the draft Order Limits which haven’t been fully surveyed.

¹² CIEEM (2018) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.2* Chartered Institute of Ecology and Environmental Management, Winchester.

Great Crested Newt

10.55 In order to confirm the presence or likely absence of GCN, some of the waterbodies within the DCO Site and within 250m of the DCO Site have been subject to environmental DNA (eDNA) analysis, which provides a positive or negative result for GCN DNA. Water samples are taken by a licensed ecologist using a sterile kit and sent to an approved laboratory. This approach follows standard methods, which are approved by Natural England and provides a rapid means of establishing the presence / likely absence of GCN. Not all ponds within 250m of the draft Order Limits have been available to access at this stage, so the survey scope will be extended to all ponds within 250m where access is agreed. Where access is not agreed, a precautionary approach will be taken whereby GCN presence will be assumed.

Bats

10.56 The following surveys have already been partially completed in accessible parts of the draft Order Limits, and will be extended to the entirety of the draft Order Limits prior to statutory consultation. The surveys are conducted to assess the presence/likely absence of roosting bats within the DCO Site and their distribution across the DCO Site in terms of foraging and commuting:

- Preliminary Roost Assessment (PRA) – External and internal building inspection survey to assess potential of buildings on the DCO Site to support roosting bats;
- Ground Level Tree Assessment (GLTA) – Ground level inspection of trees to assess potential of trees on the DCO Site to support roosting bats;
- Climbed Tree Inspection – Aerial inspection of trees assessed from the ground as providing bat roost potential;
- Day-time Bat Walkover (DBW) – Walkover of the DCO Site to assess potential bat activity including foraging areas and potential commuting routes;
- Emergence presence / absence surveys - to determine presence or likely absence or roosting bats within trees;
- Bat activity transect – to assess the species assemblage present at the DCO Site and to identify significant commuting routes and foraging locations; and
- Automated static detector deployment – to supplement the activity transect surveys by leaving static bat detectors to record for five consecutive nights per transect survey.

Badgers

10.57 A badger survey has already been completed across the accessible parts of the draft Order Limits and this will be extended to the entirety of the draft Order Limits for the statutory consultation. This survey comprises two main elements, the first of these is a thorough search for evidence of badger setts. If any setts are encountered, each sett entrance is noted and plotted, even if the entrance appeared disused. The number of holes comprising each sett is

then recorded and setts classified as disused, partially used or active. The results will be compiled within a confidential, separate badger report not available to the general public, given the continued persecution of this species

Birds

10.58 The following surveys have already been partially completed in accessible parts of the draft Order Limits, and will be extended to the entirety of the draft Order Limits prior to statutory consultation. The surveys are conducted to assess the presence and distribution of bird species across the DCO Site:

- Breeding bird surveys – four walked transect surveys have been undertaken between the months of April-July across the areas of the draft Order Limits accessible. This will be extended to the entirety of the draft Order Limits for the statutory consultation. This method is based on a territory mapping methodology in accordance with published guidance. The identity and activity of all birds, either seen or heard inside the DCO Site or within 50m of its boundary, is then recorded on maps of a suitable scale.
- Non-breeding (wintering) bird surveys – six walked transect surveys have been undertaken between the months of October-March across the areas of the draft Order Limits accessible. This will be extended to the entirety of the draft Order Limits for the statutory consultation. The survey methodology follows guidance produced by the Bird Survey & Assessment Steering Group for non-breeding bird surveys. The objective of the surveys is to identify the presence or likely absence of notable bird species.

Invertebrates

10.59 Consultation of the local data search will be undertaken to assess the likely presence of notable or protected invertebrate species which may be present within the draft Order Limits. An invertebrate scoping exercise will then be completed once all habitat data is available to assess if targeted invertebrate surveys are required where larval food plants or other suitable habitat is present. It is noted, however, that much of the site comprises intensive agricultural land which is of limited value to invertebrates.

PRELIMINARY ASSESSMENT OF POTENTIAL EFFECTS

Construction Phase

Designated Sites

10.60 The following items have been scoped into this assessment in relation to potential impacts on designated sites arising from the construction phase of development:

- Disturbance of and degradation to habitats/species associated with Highfield Moss SSSI/SBI as a result of run-off and changes to the hydrological regime of the SSSI.

10.61 Whilst a buffer between the SSSI and development will be embedded into the layout of the Proposed Development, the extent of the buffer is unknown at this stage and will be

determined primarily based on technical assessment work, and inputs from discussion with Natural England via their DAS.

- 10.62 Given the lack of connecting habitat, extended distance (i.e. beyond the terrestrial range of GCN from breeding ponds) from the DCO Site and absence of other potential impact pathways, no impacts on Rixton Clay Pits SAC/SSSI are expected and this site is scoped out of further assessment. This will also be confirmed as part of the HRA Stage 1 Screening Report.
- 10.63 There are no other designated statutory nature conservation sites within the Zone of Influence of the Proposed Development, so all other statutory sites are scoped out. Given the relative proximity of other non-statutory designations (SBIs), non-statutory sites are scoped into requiring further assessment.

Habitats

- 10.64 The following items have been scoped into this assessment in relation to potential impacts on habitats arising from the construction phase of development:
- Habitat loss or gain associated with changes in land use resulting from the Proposed Development.
 - Loss of ecological connectivity through severance of habitats resulting in fragmentation, arising from habitat loss and/or the creation of partial or complete barriers to the movement of species.
- 10.65 Habitats considered to be potentially impacted by the construction phase of the Proposed Development include grassland, hedgerows, lines of trees, scattered trees, broad-leaved woodland, ponds, and ditches.
- 10.66 Arable habitat has been scoped out of this assessment from an ecological perspective, due to its overall insignificance within the context of similar habitat locally. An agricultural land classification (ALC) assessment will be undertaken for the Proposed Development and submitted as part of the DCO application.

Fauna

- 10.67 The following items have been scoped into this assessment in relation to potential impacts on protected species arising from the construction phase of development:
- Disturbance and displacement of fauna from a change in normal conditions (light, noise, human activity) resulting in indirect loss of foraging and commuting habitat or resting and/or breeding sites.
 - Death or injury of fauna associated with construction activity and the movement of construction vehicles.
- 10.68 Protected species considered to be potentially impacted by development include amphibians (GCN, smooth newt, palmate newt, common frog, common toad), badgers, bats, birds (breeding and non-breeding), hedgehogs, and invertebrates.

10.69 All other species groups (otter/reptiles/water voles) have been scoped out of this assessment due to a lack of existing suitable habitat within the DCO Site to support these species.

Operational Phase

Designated Sites

10.70 The following items have been scoped into this assessment in relation to potential impacts on designated sites arising from the operational phase of development:

- Disturbance of and degradation to habitats/species associated with Highfield Moss SSSI/SBI resulting from changes to hydrological regime and habitat degradation from increased recreational use of the SSSI.

10.71 All other statutory and non-statutory designations have been scoped out of this assessment due to distance and lack of potential impact pathways with the potential to affect designated features during the operational phase.

Habitats

10.72 The following items have been scoped into this assessment in relation to potential impacts on habitats arising from the operational phase of development:

- The introduction of new or improved habitats associated with the establishment of new areas of habitat across the DCO Site.
- Lack of management of created and retained habitats leading to overall decline and degradation of existing and newly created habitats.

10.73 Retained habitats considered to be potentially impacted by the operational phase of development include grassland, hedgerows, lines of trees, scattered trees, broad-leaved woodland, ponds, and ditches.

10.74 Arable habitat has been scoped out of this assessment from an ecological perspective, due to its overall insignificance within the context of similar habitat locally, and such habitat would be removed as part of the construction phase of the Proposed Development and not feature in the operational phase. An agricultural land classification (ALC) assessment will be undertaken for the Proposed Development and submitted as part of the DCO application.

Fauna

10.75 The following items have been scoped into this assessment in relation to potential impacts on protected species arising from the construction phase of development:

- Disturbance associated with maintenance of the Proposed Development, including the use of artificial lighting, increased noise and general habitat degradation.

10.76 Protected and notable species considered to be potentially impacted by development include amphibians (GCN, smooth newt, palmate newt, common frog, common toad), badgers, bats,

birds (breeding and non-breeding), hedgehogs, and invertebrates.

10.77 All other species groups (otter/reptiles/water voles) have been scoped out of this assessment due to a lack of existing suitable habitat within the DCO Site to support these species.

PROPOSED AVOIDANCE AND MITIGATION MEASURES

Construction Phase

10.78 At this stage, baseline ecological data is still being gathered so the full extent of ecological impacts, and associated mitigation, are unknown. As the data is gathered and as part of the design development process, however, the need for mitigation will be identified and agreed through consultation with the relevant consultees (Natural England, MEAS, GMEU). Based on the data gathered so far, however, we anticipate the need for the following broad mitigation principles:

Designated Sites

10.79 The following avoidance and mitigation measures are proposed in relation to designated site receptors that have been scoped into this assessment and have potential to be impacted on during the construction phase of development:

- Implementation of a buffer zone between construction activities on the DCO Site and Highfield Moss SSSI, situated immediately adjacent to the northern boundary of the DCO Site.
- Preparation of a Construction Environmental Management Plan (CEMP) to incorporate measures to manage potential impacts on the neighbouring SSSI arising from development activities and control/management of Himalayan balsam.

Habitats

10.80 The following avoidance and mitigation measures will be considered in relation to habitat receptors that have been scoped into this assessment and have potential to be impacted on during the construction phase of development:

- Design to include the retention of existing habitats of value on the DCO Site (i.e. woodland, ponds, hedgerows, trees etc.) where possible, in line with development proposals.
- Preparation of a Construction Environmental Management Plan (CEMP) containing measures to manage potential impacts on retained habitats arising from development activities.

Fauna

10.81 The scope of mitigation required for protected/notable faunal groups will be identified once the baseline use of the DCO Site by the relevant species, and associated level of importance is established. This will be the subject of consultation with NE, GMEU and MEAS once data is

available and as the Proposed Development design progresses.

Operational Phase

Designated Sites

10.82 The following avoidance and mitigation measures will be considered in relation to designated site receptors that have been scoped into this assessment and have potential to be impacted on during the operational phase of the Proposed Development:

- Creation of a landscape buffer zone between the operational DCO Site and Highfield Moss SSSI in order to avoid and/or mitigate any potential impacts to the hydrological regime of the SSSI and avoid direct impacts on fauna/flora associated with the SSSI.
- Provision of greenspace areas within the Proposed Development footprint as an attractive option for the DCO Site workers to utilise as an alternative to the SSSI, therefore reducing recreational impacts on the SSSI.

Habitats

10.83 The following avoidance and mitigation measures will be considered in relation to habitat receptors that have been scoped into this assessment and have potential to be impacted on during the operational phase of the Proposed Development:

- Input into an illustrative landscape masterplan and completion of a BNG assessment to ensure the DCO Site proposals deliver a measurable net gain in biodiversity.
- Preparation of a Landscape and Ecological Management Plan (LEMP) containing measures to ensure newly created habitats reach the required conditions set out in the BNG assessment, and retained habitats are managed to not degrade over time.

Fauna

10.84 The following avoidance and mitigation measures will be considered in relation to protected species receptors that have been scoped into this assessment and have potential to be impacted on during the operational phase of development:

- Preparation of a Landscape and Ecological Management Plan (LEMP) containing measures to ensure opportunities for protected species groups are retained and enhanced within the DCO Site long-term.
- The DCO Site layout and design to, where possible, retain sensitive ecological features of importance to protected species groups (i.e. retain dark corridors along the DCO Site boundaries to maintain opportunities for foraging/commuting bats).

UNCERTAINTIES

10.85 At the time of writing, ecological surveys have not covered the entirety of the DCO Site due to the progression of ownership/access. Surveys have however covered all areas of the DCO

Site which were accessible at the time of the respective seasonal windows, with further surveys carried out over the 2025 season to cover the whole study area, which will ensure that a comprehensive data set is in place to inform the statutory consultation and subsequent Environmental Statement. As a full data set is not available yet with regards to ecological receptors or the entirety of the DCO Site, a precautionary approach has been taken whereby if there is any uncertainty regarding impacts on a given receptor, it has been scoped into further assessment. As such, this is not expected to impact the current conclusions of this assessment, as further survey effort is planned to inform on all ecological factors of the wider site.

SUMMARY OF PROPOSED EIA SCOPE

10.86 Table 10.2 below summarises the proposed scope of the assessment to be reported in the ES chapter.

Table 10.2 Summary of ecology and biodiversity impacts proposed to be scoped in and out of the EIA

Impacts	Scoped in or out?	Justification
Construction		
Manchester Mosses SAC (5.45km SE)	Scoped out and confirmed via HRA Stage 1 Screening Report	Potential impacts to the qualifying features of this designation are considered unlikely due to distance and lack of potential impact pathways with the potential to affect designated features during the construction phase.
Rixton Clay Pits SAC (7.79km SE)	Scoped out and confirmed via HRA Stage 1 Screening Report	Potential impacts to the qualifying features of this designation are considered unlikely due to distance and lack of potential impact pathways with the potential to affect designated features during the construction phase.
Highfield Moss SSSI/SBI (adjacent N)	Scoped in	Construction close to the boundary of the SSSI/SBI could lead to disturbance of/degradation to habitats and

Impacts	Scoped in or out?	Justification
		<p>associated species. However following the design principles, it is proposed that a buffer be put in place to prevent impact during construction. The precise scale of the buffer is to be determined via technical assessment and ongoing consultation with relevant stakeholders.</p> <p>There is potential for direct damage to or degradation of habitats in the adjacent SSSI/SBI. However with the implementation of the buffer, as well as CEMP/LEMP reports should suffice to prevent impacts during construction.</p>
All other non-statutory sites (17 total within 2km of the DCO Site)	Scoped in	Potential impacts to the qualifying features of these designation are considered unlikely due to distance and lack of potential impact pathways with the potential to affect designated features during the construction phase.
Arable Land	Scoped out	Loss of extensive areas of arable habitat is anticipated. However, this habitat is insignificant within the context of similar habitat locally.
Grassland	Scoped in	Potential for habitat loss (losses as yet undefined). Proposals will likely require the loss of some areas of grassland.
Hedgerow	Scoped in	Potential for habitat loss (losses as yet undefined). Some

Impacts	Scoped in or out?	Justification
		hedgerows may require removal in order to implement DCO Site plans.
Lines of Trees	Scoped in	Potential for habitat loss (losses as yet undefined). Some lines of trees may require removal in order to implement DCO Site plans.
Scattered Trees	Scoped in	Potential for habitat loss (losses as yet undefined). Some trees may require removal in order to implement DCO Site plans.
Broadleaved Woodland	Scoped in	No loss of this habitat is anticipated as woodland habitat is expected to be retained with the DCO Site proposals. However, scoped in as precise development footprint is yet to be confirmed.
Ponds	Scoped in	Habitat loss in general is to be determined but design principles indicate no loss of ponds will occur.
Ditches	Scoped in	<p>No loss of this habitat is anticipated as no ditches are known to be present on the DCO Site, however ditches are present adjacent to the DCO Site on the edge of Highfield Moss SSSI.</p> <p>A buffer is expected to be implemented between the DCO Site construction and the SSSI, which is expected to be sufficient to protect the habitat from any</p>

Impacts	Scoped in or out?	Justification
		potential damage during construction.
Degradation of Retained Habitats	Scoped in	Potential for damage to retained habitats will be avoided by following the design principals set out above and CEMP/LEMP.
Invasive non-native Flora	Scoped in	Potential to spread invasive species through DCO Site construction activities.
Amphibians (GCN, smooth newt, palmate newt, common frog, common toad)	Scoped in	Loss / fragmentation of habitat Disturbance, killing / injury.
Badger	Scoped in	Loss / fragmentation of habitat Disturbance, killing / injury.
Bats	Scoped in	Loss / fragmentation of habitat, disturbance, potential loss of roost opportunities in trees.
Birds (breeding)	Scoped in	Loss / fragmentation of habitat, disturbance, killing / injury could affect breeding populations of farmland bird species locally including red listed / priority species.
Birds (non-breeding)	Scoped in	There is the potential for loss of habitat for farmland bird species of conservation concern using the DCO Site as a habitat resource during the winter months.

Impacts	Scoped in or out?	Justification
Hedgehog	Scoped in	Loss / fragmentation of habitat Disturbance, killing / injury in the absence of appropriate controls during construction.
Invertebrates	Scoped In	Minor loss / fragmentation of habitat. Disturbance, killing / injury in the absence of appropriate controls during construction.
Otter	Scoped Out	No habitats present on the DCO Site with suitability to support this species group. As such, no construction phase impacts predicted.
Reptiles	Scoped Out	No known habitats present on the DCO Site with suitability to support this species group. As such, no construction phase impacts predicted.
Water Vole	Scoped Out	No known habitats present on the DCO Site with suitability to support this species group. As such, no construction phase impacts predicted.
Operation		
Manchester Mosses SAC (5.45km SE)	Scoped Out and confirmed via HRA Stage 1 Screening Report	Potential impacts to the qualifying features of this designation are considered unlikely due to distance and lack of potential impact pathways with the potential to affect designated features during the

Impacts	Scoped in or out?	Justification
		operational phase.
Rixton Clay Pits SAC (7.79km SE)	Scoped Out and confirmed via HRA Stage 1 Screening Report	Potential impacts to the qualifying features of this designation are considered unlikely due to distance and lack of potential impact pathways with the potential to affect designated features during the operational phase.
Highfield Moss SSSI/SBI (adjacent N)	Scoped in	<p>Potential impacts to the qualifying features of these designations are considered unlikely due to the proximity of the SBI/SSSI to the DCO Site.</p> <p>For the operational phase however, impacts are primarily expected to arise from potential changes to hydrological regime and increased recreational use of the designation by workers on the operational DCO Site.</p> <p>Considered to be ‘moderate’ impact on account of the national significance of the site.</p>
All other non-statutory sites (17 total within 2km of DCO Site)	Scoped Out	Potential impacts to the qualifying features of these designations are considered unlikely due to distance and lack of potential impact pathways with the potential to affect designated features during the operational phase.
Arable Land	Scoped Out	No operational phase impacts predicted, as the area of habitat is insignificant within the context

Impacts	Scoped in or out?	Justification
		of similar habitat locally.
Grassland	Scoped in	During operation of the development, lack of management of created and retained habitats could degrade the habitat and reduce resources for some species such as amphibians, bats and birds
Hedgerow	Scoped in	During operation of the development, lack of management of created and retained habitats could degrade the habitat and reduce resources for some species such as amphibians, bats and birds
Lines of Trees	Scoped in	During operation of the development, lack of management of created and retained habitats could degrade the habitat and reduce resources for some species such as amphibians, bats and birds
Scattered Trees	Scoped in	During operation of the development, lack of management of created and retained habitats could degrade the habitat and reduce resources for some species such as amphibians, bats and birds
Broadleaved Woodland	Scoped in	During operation of the development, lack of management of created and retained habitats could degrade the habitat and reduce resources for some species such as

Impacts	Scoped in or out?	Justification
		amphibians, bats and birds
Ponds	Scoped in	During operation of the development, lack of management of created and retained habitats could degrade the habitat and reduce resources for aquatic fauna.
Ditches	Scoped in	During operation of the development, lack of management of created and retained habitats could degrade the habitat and reduce resources for some aquatic fauna.
Degradation of Retained Habitats	Scoped in	During operation of the development, lack of management of created and retained habitats could degrade the habitat and reduce resources for some species such as amphibians, bats and birds
Invasive non-native Flora	Scoped in	Potential for spread if Himalayan balsam remains in areas of surrounding habitat post construction.
Amphibians (GCN, smooth newt, palmate newt, common frog and common toad)	Scoped in	<p>Impacts previously identified in relation to habitat loss/fragmentation is of relevance here.</p> <p>Species could also be disturbed/displaced during operation maintenance.</p>
Badger	Scoped in	Impacts previously identified in relation to habitat

Impacts	Scoped in or out?	Justification
	Potential minor adverse effect	loss/fragmentation is of relevance here. Species could also be disturbed/displaced during operation maintenance.
Bats	Scoped in Potential minor adverse effect	Impacts previously identified in relation to habitat loss/fragmentation is of relevance here. Species could also be disturbed/displaced during operation maintenance.
Birds (breeding)	Scoped in Potential minor adverse effect	Potential habitat displacement and avoidance of ground nesting birds. Reduced opportunities of foraging and breeding habitat. Species could also be disturbed/displaced during operation maintenance.
Birds (non-breeding)	Scoped in Potential minor adverse effect	Potential habitat displacement and avoidance of non-breeding birds during the winter months. Reduced opportunities of foraging and roosting habitat. Species could also be disturbed/displaced during operation maintenance.
Hedgehog	Scoped in	Impacts previously identified in relation to habitat loss/fragmentation is of

Impacts	Scoped in or out?	Justification
		<p>relevance here.</p> <p>Species could also be disturbed/displaced during operation maintenance.</p>
Invertebrates	Scoped In	Impacts previously identified in relation to habitat loss/fragmentation is of relevance here.
Otter	Scoped Out	No habitats present on DCO Site with suitability to support this species group. As such, no operational phase impacts predicted.
Reptiles	Scoped Out	No habitats present on DCO Site with suitability to support this species group. As such, no operational phase impacts predicted.
Water Vole	Scoped Out	No habitats present on DCO Site with suitability to support this species group. As such, no operational phase impacts predicted.

Chapter 11 ◆ Built Heritage

INTRODUCTION

- 11.1 This chapter presents the scope of detailed environmental assessment for Built Heritage. Landscape and Visual Impact is considered separately in Chapter 9 and Archaeology in Chapter 12 of this Scoping Report. This chapter presents the policy and legislative context, the approach to collecting baseline data and an overview of the relevant baseline conditions within the DCO Site and surrounding area. It sets out the scope of assessment including, with justification, assets that are proposed to be scoped in for detailed assessment and concludes by outlining the method that will be used to undertake the detailed assessment.
- 11.2 In line with the EIA Regulations, this Scoping Report chapter has been compiled by appropriately qualified, experienced, and competent experts. This chapter has been prepared by Icen Projects and is authored by Georgina Mark BA (Hons) MSt (Cantab), Senior Heritage Consultant, Georgia Foy MA MAUD IHBC, Associate-Director – Built Heritage & Townscape with guidance and review by Laurie Handcock MA (Cantab) MSc IHBC, Director – Built Heritage & Townscape.

RELEVANT LAW, POLICY AND GUIDANCE

- 11.3 In assessing the likely effects of the Proposed Development on built heritage receptors, the intention is to identify how and to what degree it would affect the heritage significance of identified built heritage assets. The methodology for the assessment of potential effects on designated and non-designated heritage assets takes into account the following legislation, policy and guidance. The DCO will be assessed against the Infrastructure Planning (Decisions) Regulations 2010 and National Networks National Policy Statement ('NPSNN', adopted 2024). The National Planning Policy Framework ('NPPF', 2023) and relevant local planning policy are material considerations.

Legislation

- Infrastructure Planning (Decisions) Regulations 2010 – specific reference to Regulation 3.
- Planning (Listed Building and Conservation Areas) Act 1990 (excluding normal planning procedures, which are disapplied by the DCO, which if granted, would encompass all of the normal consents).

National Planning Policy

- National Networks National Policy Statement ('NPSNN', adopted 2024) – specific reference to paragraphs 5.205-5.226 which relate to the historic environment.

- National Planning Policy Framework ('NPPF', 2023) – specific reference to Section 16: Conserving and Enhancing the Historic Environment.
 - A revised NPPF is currently undergoing through the consultation process: Consultation Draft (2024), albeit there are no material changes proposed to the heritage policy at Section 16.

Local Planning Policy

- St Helens Borough Council Local Plan Up to 2037 (adopted 2022) - specific reference to Policies LPA01; Spatial Strategy, LPA09; Parkside East, LPA10; Parkside West and LPC11; Historic Environment.
- Wigan Statutory Development Plan comprising: Core Strategy DPD Remaining Policies (March 2024) – specific reference to Policy CP11: Historic Environment; and Places for Everyone Joint Development Plan Document for Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Tameside, Trafford and Wigan 2022 to 2039 (adopted 2024) – specific reference to Policy JP-P2: Heritage. There are a number of Saved Unitary Development Plan (2006) policies still in force, however none relevant to this assessment.
- Warrington Borough Council Local Plan 2021/22 - 2038/39 (2023) – specific reference to Policies W5; Warrington's Historic Environment, DC2; Historic Environment and DC6; Quality of Place.

Other Relevant Guidance

- Planning Practice Guidance: Historic Environment (2019).
- Principles of Cultural Heritage Impact Assessment in the UK (IEMA, IHBC, CiFA, 2021).
- Conservation Principles, Policies and Guidance (Historic England, 2008).
- Historic Environment Good Practice Advice in Planning Note 2. Managing Significance in Decision Taking in the Historic Environment ('GPA2', Historic England, 2015).
- Historic Environment Good Practice Advice in Planning, Note 3: The Setting of Heritage Assets, Second Edition ('GPA3', Historic England, 2017).
- St Helens Borough Council 'List of Locally Important Buildings SPD' (2011).
- St Helens unadopted and unpublished local list of buildings (2012), obtained from St Helens Borough Council.
- Wigan Council 'Historic Environment Strategy SPD' (2021).
- Appendix 5 of Warrington Borough Council's Local Plan 2022/23 to 2038/39 (2023) which presents a local list of Non-Designated Heritage Assets within the LPA, also presented by the Warrington Borough Council Interactive Map.

- 11.4 Heritage Assets are defined in Annex 2 of the NPPF as “*A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. It includes designated heritage assets and assets identified by the local planning authority (including local listing)*”.
- 11.5 The setting of a heritage asset is defined as: “*the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral*” (NPPF). The scope of this assessment is proportionate to the significance of identified heritage assets and the nature of change proposed, in line with NPPF paragraph 200.

CONSULTATION TO DATE

- 11.6 An initial discussion was held between the Applicant, Historic England (Ross Brazer) and St Helens Council (Ian Bond, Growth Lancashire) on the 27th June 2024 to introduce the emerging Proposed Development and discuss relevant heritage matters of the Intermodal Logistics Park North Rail Freight Interchange (hereafter, ‘ILPN RFI’). However, no formal consultation has been carried out and no formal comments from either Historic England or St Helens Council have been received to this date.
- 11.7 Where the relevant local authorities (St Helens and Wigan) do not have published local heritage lists, they have been contacted to request this data. This has been provided by St Helens (listed above) and Wigan have confirmed non-designated heritage assets are identified through the planning process.
- 11.8 Engagement with relevant stakeholders, including Historic England and local authority conservation officers (St Helens, Wigan and Warrington – including Merseyside Environmental Advisory Service / Growth Lancashire, as appropriate, where providing historic environment services), will be undertaken throughout the application process, including at key milestones after scoping and PEIR comments received, to discuss key heritage considerations.

BASELINE CONDITIONS AND MAIN ISSUES

Approach to Collection of Baseline Data

- 11.9 For the basis of the scoping report, the following sources have been utilised to define the baseline of the cultural heritage assessment:
- National Heritage List for England (NHLE, Historic England) for data on nationally designated heritage assets;
 - Greater Manchester Historic Environment Record (HER) for data on designated and non-designated heritage assets within Warrington and Wigan;
 - Merseyside Historic Environment Record (HER) for data on designated and non-designated heritage assets within St Helens;

- Historic cartography, including national Ordnance Survey maps and local 19th century Tithe Maps. These sources inform the baseline understanding on the historic representation of the current landscape and its uses;
- LPA local lists have been referenced to support the identification of non-designated heritage assets, as required under paragraph 5.208 of NPSNN.

11.10 This research was supplemented by fieldwork undertaken in June and September 2024, including a site walkthrough and photographic recording.

11.11 A Zone of Theoretical Visibility ('ZTV') was prepared by the landscape consultant for ILP North to understand the potential visibility of the Proposed Development. This ZTV is further discussed in Chapter 9 of this document.

11.12 A study area of 1km radius from the DCO Site has been used to identify designated and non-designated heritage assets which may be affected by the Proposed Development (Figure 11.1). This study area is based on professional judgement, taking into account the location and nature of heritage assets, the ZTV, the nature of the Proposed Development and initial judgements on the likelihood for significant effects to the value of heritage assets as a result of the Proposed Development.

11.13 A screening process has then been undertaken within the study area to scope out any heritage assets which are unlikely to be affected by the Proposed Development. This has been based on an initial understanding of the significance and contribution of setting to significance of each asset (ascertained through reviewing the sources listed above) and an understanding of the potential visibility of the Proposed Development (ZTV data overlaid on heritage asset mapping at Figure 11.2).

11.14 Given the scale of the Proposed Development and the potential visibility identified on the ZTV beyond 1km, designated heritage assets within a 3km radius were reviewed to identify whether there may be any significant effects arising from the Proposed Development that would merit a greater study area than 1km (Figure 11.3). Whilst several highly graded heritage assets (Grade I and II*) were identified,¹ these were reviewed against the ZTV and there is unlikely to be any visibility of the Proposed Development from these heritage assets, and if there were to be, this would be glimpsed and at a distance where it unlikely to affect the contribution that setting makes to the value of these assets. A study area of 1km was considered for the adjacent Parkside West scheme (ref. P/2018/0048/OUP) and no significant effects were identified to heritage assets beyond 1km. As such, alongside the reasoning set out at 11.12, it is considered that a 1km study area is sufficient to allow for assessment of all built heritage assets whose significance and setting may be affected, albeit in a proportionate manner in line with NPSNN paragraph 5.210.

Baseline Environment

11.15 There are 17 designated heritage assets, 16 NDHAs and 8 locally listed buildings identified

¹ Sankey Viaduct Over Sankey Brook (Grade I), Church of St Oswald (Grade I), Myddleton Hall (Grade II*), Gatehouse to Bradlegh Old Hall (Grade II*)

within 1km radius of the DCO Site (see Heritage Asset Map at Figure 11.1).

- 11.16 The DCO Site sits within the vicinity of several heritage receptors. There are two designated heritage assets within the DCO Site: the Huskisson Memorial (Grade II listed) and a small part of the Registered Historic Battlefield of Winwick.
- 11.17 The Huskisson Memorial is noted by Historic England to have been erected in 1831 in memory of W. Huskisson, Liberal M.P. for Liverpool who was killed by a train during the opening celebrations of the Liverpool and Manchester railway in 1830. Desk-based research suggests that the asset's 'mausoleum' structure is likely a later construction, installed either in 1912 after the former Parkside Railway Station buildings were demolished, or in 1933 at the centenary of Huskisson's death. The original memorial to Huskisson's death is understood to have comprised a memorial plaque which was installed on the base of an iron water tank associated with the former station. The original plaque was removed and is presently housed within the National Rail Museum, York, and the plaque in situ is a modern replica.
- 11.18 The location of the asset is important due to its relationship to the event to which it memorialises. However, the asset's historic record (plaque) and its design also facilitates an understanding of this event and therefore its location is not the sole source of its heritage interest. The historic setting of the asset has altered considerably over time, as evidenced by historic map and photograph regression.
- 11.19 The asset is not publicly accessible or appreciable, given its proximity to the live railway. Its situation, built into the bankside of the railway, is elevated and set back from the railway line, limiting access to the memorial and thus restricting an appreciation of its significance and maintenance of its fabric. The asset is in need of extensive repair, with detached plasterwork exposing its stone and brick construction, and the presence of algae suggesting damp issues. The poor condition of the asset, having evidently deteriorated following a series of restoration works in c.2001, suggests that the general inaccessibility of the asset risks its long-term conservation. The asset is likewise situated away from any public rights of way or cycle routes, thereby further limiting an appreciation of it. It is visible from the railway, however the asset is only experienced in glimpsed, kinetic views from the train which do not facilitate a thorough understanding of its setting and significance.
- 11.20 The Registered Historic Battlefield of Winwick is located south of the DCO Site, extending between the towns of Newton-Le-Willows and Winwick, along Winwick Road and Newton Road. A very limited part of the asset's designation boundary encroaches into the DCO Site, close to Parkside Colliery.
- 11.21 As described by Historic England, the asset comprises, *'the site of the Battle of Winwick on 19 August 1648, which ended the Second English Civil War as a military contest'*. It has historic interest as a nationally important battlefield associated with the Second English Civil War, as well as its archaeological potential as *'the only English battlefield of the Second Civil War which remains in a good state of preservation'*. Finally, its topography is of some importance as the defensive and attacking positions of opposing armies remain legible in the landscape.
- 11.22 In 2021, the asset was the subject of permission (Parkside West phase 1) for the construction

of up to 92,900m² of employment floorspace (use class B8 with ancillary B1 (a)) and associated servicing and infrastructure (ref. P/2018/0048/OUP). This is Phase 1 of a larger regeneration scheme known as the Parkside West development scheme. Both the Inspector and Secretary of State cited some inevitable harm to the Registered Battlefield resulting from the Parkside redevelopment, however, in the context of the very significant amount of change that has occurred over the last century, alongside the proposed mitigation, the harm was judged to be limited and outweighed by the public benefits of the scheme. Parkside West Phase 2 has recently been submitted to St Helens (P/2024/0419/HYEIA) and is currently under determination.

- 11.23 Parkside Road Bridge is located within the DCO Site and is considered to be a non-designated heritage asset for the purposes of this scoping report. Desk-based research suggests that the bridge was originally constructed around the mid-nineteenth century and has been subjected to considerable rebuilding and alteration over time. On-site analysis of the bridge further evidences the bridge's alteration and suggests that an additional couple of courses have been applied across the bridge to extend it upwards. From trackside, evidence of deterioration is visible amongst the bridge's brickwork.
- 11.24 The DCO Site lies approximately 25m east of the High Street and Willow Park Conservation Area, located within the St Helens LPA boundary. The conservation area comprises two distinct parts: the High Street and Willow Park. It is a largely unaltered historic market town which retains its original village character and association with the surrounding agricultural community.
- 11.25 Various listed buildings are located within 500m of the DCO Site. These include the Grade II listed Newton-le-Willows Station and the Grade II listed Newton Viaduct, both of which comprise nineteenth-century structures associated with the development of the Chat Moss Line. The new station building for Newton-le-Willows Railway Station opened in 2019 and now serves as the principal entrance and facility building for the station.
- 11.26 The Grade II listed Barn to East of Newton Park Farmhouse and Grade II listed Newton Park Farmhouse are located adjacent to the DCO Site. These assets were the subject of an application for residential development (PNW/5093/219/28) which was called in by the Secretary of State (2008). The scheme was considered in the context of a forthcoming Astral SRFI scheme (withdrawn in 2010) and was ultimately refused permission largely due to the prejudice this would have had upon delivery of the forthcoming SRFI scheme; a development which necessitated the relocation of the listed farmhouse. Whilst the SRFI scheme did not progress through the planning process, other developments have resulted in considerable change to the setting of the assets, most notably the Parkside West development scheme.
- 11.27 Other listed buildings located within 500m of the DCO Site include the Grade II listed Woodhead Farmhouse, the Grade II listed Barn to North of Woodhead Farmhouse and the Grade II listed St Oswald's Well in Field to South of Woodhead Farmhouse, which is also a scheduled monument. These assets are located to the south and south-east of the DCO Site and are separated from it by the M6 and Parkside Colliery.
- 11.28 The Grade II listed Wall, Gates and Gate Piers to Front of Kenyon Hall is located immediately east of the DCO Site beyond Winwick Road, amongst a cluster of buildings associated with

Kenyon Hall Farm Shop. It comprises early eighteenth-century gate piers with nineteenth century gates. The asset is not visible or readily accessible from the public realm.

- 11.29 The Grade II listed Holly House is located to the north of the DCO Site. It comprises a detached house, constructed c.1830, set within a well-defined plot, bounded by mature hedges and vegetation.
- 11.30 The Grade II listed Church of St Peter and the Grade II listed Parish Stocks, situated immediately adjacent, are located within approximately 320m north-west of the DCO Site. These assets are included within the High Street and Willow Park Conservation Area.
- 11.31 Two scheduled monuments, Castle Hill Motte and Bailey and Bowl Barrow and Bowl Barrow West of Highfield Lane, are within 1km radius of the DCO Site. A collection of listed buildings is also located in Newton-le-Willows town, including within the High Street and Willow Park Conservation Area.
- 11.32 The Greater Manchester HER and the Merseyside HER identify multiple designated and non-designated heritage assets located within the assessment scope. Within the DCO Site itself lies Highfield Farm Barn, an NDHA which is described by the Merseyside HER as being associated with the former Highfield Farm (now demolished). The asset is described as having been much physically altered and extended.
- 11.33 The Merseyside HER identifies the Railway Connecting Manchester to Liverpool Line (the Chat Moss Line) with the Warrington to Preston Line (West Coast Mainline) as an NDHA that is located at the junction of the A49 bridge and the railway, to the south west of the DCO Site. However an initial study of the asset suggests that it pertains to the junction of the junction of the West Coast Mainline and the Chat Moss Line, located further north. The extent of this asset's encompassment of the railway line is unspecified, however it is likely specific to the piece of railway extending branching from the West Coast Mainline, near the southern end of Alder Route Lane, northwards to where it intersects with the Chat Moss Line, near Rosemary Drive. This extent of railway is understood to have been constructed in 1864 and referred to the Winwick Junction to Golborne Junction section of the London and Northwestern Railway.
- 11.34 A group of NDHAs identified by the Merseyside HER are located approximately 280m north of the DCO Site, along Golborne Dale Road. These include Nos. 45-51 Golborne Dale Road, No. 6 Bull Houses and Nos. 18-14 Bull Houses. No. 149 Mill Lane and The Millstone Public House, NDHAs identified by the Merseyside HER, are also located approximately 250m west of the DCO Site, along Mill Lane.
- 11.35 St Helens Borough Council have adopted a List of Locally Important Buildings SPD (2011) which provides useful guidance on the management of locally listed buildings. Whilst the SPD references a local list that has been published as a separate document, communications with the Council have confirmed that this list has not be adopted or published. Instead, an unadopted and unpublished local list of buildings (2012), shared by the Council, has been referenced.
- 11.36 The St Helens local list identifies a collection of assets situated within the High Street and

Willow Park Conservation Area, located within the 1km of the DCO Site. These are; The Oak Tree Inn, The Old Courthouse, The Pied Bull Hotel, No. 51 High Street, No. 2 High Street, Kirkfield Hotel, The Old Vicarage and No. 1 Mill Lane.

11.37 Warrington Borough Council's Local List, presented within their Local Plan (2023), identifies Highfield, Kenyon Lane, a locally listed building located approximately 965m east of the DCO Site. It likewise identifies Kenylo Bridge, Sandy Brow Lane, located approximately 470m east of the DCO Site and Oven Back Farm, located adjacent to the DCO Site, along Winwick Lane. Finally, it also identifies a group of locally listed buildings in Hermitage Green on (or just off) Golborne Road; Gerosa Avenue, Rose Mount Terrace, Monk House, The Cottage and Pipers Hole Cottage.

Proposed approach to surveys and further baseline data collection

11.38 Further desk-based and archival research is also planned to ensure a comprehensive understanding of the value and settings of identified built heritage assets. This will include detailed analysis of the Greater Manchester and Merseyside Historic Environment Record data, relevant documentary records and historic aerial photography.

11.39 Wigan Council have a website publication which sets out the criteria for a building to be included on the local list, encompassing age, rarity, historic and architectural interest. The list itself has not been published, and the LPA have confirmed that non-designated heritage assets are addressed as they are identified through the planning process.

11.40 Further fieldwork in the form of site walkovers and a photographic recording will be undertaken in both summer and winter to fully understand any seasonal changes to settings and visibility.

APPROACH AND METHODOLOGY

11.41 Under the requirements of NPSNN, the NPPF, and of other guidance mentioned above such as IEMA's Principles for Cultural Heritage Impact Assessment and Historic England's Good Practice Advice in Planning Notes (GPAs), the process of heritage impact assessments can be summarised as involving three parts:

- Understanding the heritage significance of identified designated and non-designated heritage assets, including the contribution made by their settings;
- Understanding the nature and extent of potential effects to heritage significance of identified heritage assets; and
- Making a judgement on the impact that the proposals may have on heritage significance.

Value

11.42 NPSNN defines a heritage asset as *'buildings, monuments, sites, places, areas or landscapes. The sum of the heritage interests that a heritage asset holds is referred to as its significance. Significance derives not only from a heritage asset's physical presence, but also from its*

setting’ (para. 5.206). They are, *‘elements of the historic environment that hold value to this and future generations because of their historic, archaeological, architectural or artistic interest’* (ibid). Heritage assets can be designated or non-designated.

- 11.43 For the purposes of this assessment and to avoid conflict with the EIA use of the term ‘significance’, the heritage significance will be referred to as ‘value’.
- 11.44 NPSNN requires the value of any heritage asset that may be affected by a project to be described in a proportionate manner in order to understand the potential for significant impacts on heritage assets (paras. 5.210). The methodology used here for understanding value draws from the approach set out in Historic England’s ‘Conservation Principles’ and NPPF Annex 2 by identifying and describing the components which contribute to the heritage interests. In line with the principles outlined in IEMA’s CHIA, the final part of understanding the value of a heritage asset is identifying its importance which is an informed professional judgement that can be scaled (as per Table 11.1). This scale is informed by the designation of an asset.
- 11.45 As identified in NPSNN paragraphs 5.212 – 5.215, value can also derive from its setting. As such, in line with Historic England’s guidance on setting in their Good Practice Advice in Planning, Note 3 (GPA3): The Setting of Heritage Assets, and the requirements of paragraph 5.9.10, the contribution of setting to value of identified heritage assets will be described in a proportionate manner.

Table 11.1 Sensitivity Classification

Heritage Value	Designation of Receptor
Very High	Site acknowledged of international importance / World Heritage Site
High	Grade I or Grade II* Listed Asset / Scheduled Monument
Medium	Grade II Listed Asset / Conservation Area
Low	Locally Listed Asset / Designated Heritage Assets compromised by poor preservation
Very Low	Non-Designated Heritage Asset (not recognised as locally listed) / Locally Listed Asset with little or no surviving interest

Assessing Effects

- 11.46 Legislative and policy requirements for the assessment of effects on heritage assets require the assessor to establish whether the value is preserved, better revealed/enhanced or harmed as a result of the ILPN RFI.
- 11.47 There are two ways in which the ILPN RFI can affect heritage assets:
- by physical changes to the fabric, use and visual appearance of designated or non-designated heritage assets (known as direct effects); and
 - by changes to the setting of designated or non-designated heritage assets in the vicinity (known as indirect effects). The approach to assessing setting follows the five step approach set out in Historic England's GPA3.
- 11.48 The magnitude of change is a combination of (i) the size and scale of the potential change; and (ii) the duration of the change and its reversibility i.e. effects during the construction phase are likely to be temporary effects, whereas effects during operation would span for the duration of the ILPN RFI. The magnitude of change can be high, medium, low or very low. The consideration of magnitude of change takes into account environmental measures embedded in the proposed design.
- 11.49 The significance of the effects on heritage assets is established by combining judgements about the value of the receptors affected with the magnitude of the change, in order to identify the potential effect. For the purposes of EIA, major and moderate effects are considered to be significant effects.
- 11.50 Once the significance of the potential effect has been classified, consideration is given to whether the qualitative nature of the resultant effect is, therefore, 'beneficial', 'adverse' or 'neutral'.
- 11.51 Beneficial effects occur when the ILPN RFI would enhance the value and contribution of the setting to value of heritage assets. In line with NPSNN paragraphs 5.221, 5.222 and 5.223, this can include taking opportunities, where possible, for proposals to make a positive contribution, for example by enhancing value or setting through sensitive design or enhancing access to, or interpretation, understanding and appreciation of, the heritage assets affected by the Proposed Development.
- 11.52 Adverse effects occur when the ILPN RFI would harm the value and contribution of the setting to value of heritage assets. Within NPSNN paragraphs 5.219 – 5.223 and the 2023 NPPF (paras.205-208), impacts affecting the value of heritage assets are considered in terms of harm, and there is a requirement to determine whether the level of harm to designated heritage assets amounts to 'substantial harm' or 'less than substantial harm'. There is no direct correlation between the classification of effect and the level of harm caused to heritage value, however in general terms, major adverse may equate to substantial harm and moderate or minor adverse may equate to different levels on the spectrum of less-than-

substantial harm. For any harm to non-designated heritage assets, NPPF paragraph 209 requires balanced judgement with regard to scale of harm or loss and value.

- 11.53 Neutral effects occur when the ILPN RFI would: preserve (or not materially affect) the setting or value of heritage assets. Neutral effects can also occur where there is considered to be an equal balance between beneficial and adverse heritage effects. The approach to balancing heritage harms and heritage benefits to reach a 'net' position is established in recent case law².
- 11.54 When considering any likely significant effects, it should be described how any likely significant negative effects would be avoided, reduced, mitigated or compensated for, as per the mitigation hierarchy (NPSNN paragraphs 5.212 – 5.215).
- 11.55 Pursuant to NPSNN paragraphs 5.216 – 5.226 and NPPF paras 206-208, any harmful impact to the value and contribution of setting to significance of a designated heritage asset should require a clear and convincing justification and be weighed against the public benefits of the ILPN RFI. The greater the negative impact to value, the greater the benefits that will be needed to justify approval.

Magnitude of Change

- 11.56 This stage comprises a factual description of the level of change occurring to heritage assets. There are two ways in which new development can affect the significance of heritage assets:
 - by physical changes to the fabric, use and visual appearance of heritage assets (known as direct effects) i.e., if the ILPN RFI includes the demolition or alteration to listed or locally listed buildings, or within conservation areas or registered parks and gardens; and
 - by changes to the setting of designated or non-designated heritage assets in the vicinity (known as indirect effects).
- 11.57 The magnitude of change for heritage assessments is considered to be a combination of (i) the size and scale of the potential change; (ii) the duration of the change and its reversibility. Magnitude of change will be described in line with Table 11.2 below.

Table 11.2 Magnitude of Change Classification

Magnitude of Change	Typical Criteria
High	Total loss, major alteration or fundamental change to key characteristics or features of the baseline.

² City & Country Bramshill Ltd v Secretary of State for Housing, Communities And Local Government & Ors [2021] EWCA Civ 320

Magnitude of Change	Typical Criteria
Medium	Partial loss, material alteration or visible but contextual change to key characteristics or features of the baseline.
Low	Minor loss, alteration or discernible but non-material change to key characteristics or features of the baseline.
Negligible	Barely distinguishable or very limited change from baseline conditions.

11.58 Establishing the overall effect combines judgements about sensitivity and magnitude of change. This will first be undertaken as a qualitative assessment describing the anticipated effects using professional judgement on whether the proposal would enhance or harm the key features of special interest which contribute to the value of an asset. This will then be summarised in a technical assessment. Judgements about sensitivity and magnitude of change will be graded as major, moderate, minor, negligible or none, according to the approach set out in Table 11.3 below. Effects will then be classified as either beneficial, adverse or neutral. Where a fine balance occurs between both beneficial and adverse effects arising from the ILPN RFI, or where effects would preserve the special interest of the asset, it may result in a ‘neutral’ effect.

Table 11.3 Overall Effect

	Magnitude of Change			
Sensitivity or Importance	High	Medium	Low	Negligible
High	Major	Moderate	Moderate/Minor	Minor
Medium	Moderate	Moderate	Minor	Minor/Negligible
Low	Moderate/Minor	Minor	Minor/Negligible	Negligible
Negligible	Minor	Minor/Negligible	Negligible	Negligible

PRELIMINARY ASSESSMENT OF POTENTIAL EFFECTS

- 11.59 The ILPN RFI may require the relocation of the Grade II Huskisson Memorial. As discussed, this asset is currently publicly inaccessible and almost completely unappreciable as a result, affecting its role as a public memorial. Likewise, the inaccessibility of the asset and its disused location along the bank of the railway line does not facilitate regular maintenance and repair. As a result, the condition of the asset has deteriorated. Overall, the baseline position of the asset is that its value is at risk due to its lack of maintenance and disuse.
- 11.60 The ILPN RFI presents an opportunity to relocate the asset to a position which will facilitate its regular maintenance and a better expression and appreciation of its significance by the public. The proposed new location of the asset is undetermined and will be informed by close engagement with relevant consultees. The principle of re-locating the asset with regards to its potential effects is to be assessed at the EIA process.
- 11.61 Given its part-inclusion within the DCO Site, the Registered Historic Battlefield of Winwick will potentially be directly impacted by the Proposed Development and will thereby potentially experience residual effects. However, a very limited part of the designated battlefield interacts with the DCO Site and any impact from the Proposed Development will largely be indirect.
- 11.62 Highfield Farm Barn (NDHA, located within the DCO Site) may experience direct impacts resulting from the Proposed Development, including potential for the loss of this asset. This would need to be considered in the context of the value of this asset (very low), as per NPSNN paragraph 5.210 and NPPF para.209.
- 11.63 With regards to other heritage assets identified within the baseline assessment of the DCO Site, these assets may experience indirect effects through the addition of development which may affect the contribution that their settings make to their value. Potential visual effects arising from the impact of development within the setting of the assets also may arise. During the construction phase of the Proposed Development, potential effects arising from the noise and vibration of construction activity, as well as the associated increase in traffic activity and changes to the setting on account of the appearance of cranes and other tall work-site plant in views to and from the assets, may arise. Such effects would likely be limited in scale and temporary in duration.
- 11.64 Where the DCO Site is considered to have no relationship with the setting of an asset by way of its intervisibility (informed by ZTV analysis), its proximity, and its lack of historic, architectural and experiential association with the asset, the asset is considered unlikely to experience effects arising from the Proposed Development. As such, in accordance with NPSNN paragraphs 5.210 and 5.216 and NPPF paragraph 200, these assets are proposed to be scoped out of the assessment.

PROPOSED AVOIDANCE AND MITIGATION MEASURES

- 11.65 In a built heritage context, the key statutory and policy tests are to preserve or enhance the

setting and value of heritage assets. Therefore, good design generally means mitigating potential harm to heritage assets and their settings, i.e. by understanding and taking into account the key features which contribute to the value of heritage assets in the design, such as key views.

- 11.66 There is opportunity to increase the appreciation of value of the Huskisson Memorial by enhancing its condition, public accessibility, interpretation and experience.
- 11.67 NPSNN paragraphs 5.212 and 5.213 provide guidance specifically regarding the mitigation of potential impacts of a proposed development upon the historic environment. The NPSNN identifies that where an asset may be wholly or partially lost, a documentary record should be prepared and can act as mitigation. However, it also acknowledges that the ability to record evidence should not be a factor in deciding whether consent is given.

UNCERTAINTIES

- 11.68 It is assumed that there will be some level of access to all identified heritage assets to fully understand their value and setting, particularly if not visible from publicly accessible vantage points. In the event that access is not available, professional judgement will be used, based on available research and data.

SUMMARY OF PROPOSED EIA SCOPE

Table 11.4 Summary of Built Heritage impacts proposed to be scoped in and out of the EIA

Impacts	Scoped in or out?	Justification
Construction		
Designated Heritage Assets within the DCO Site: <ul style="list-style-type: none"> • Huskisson Memorial on South Side of Railway 60 Metres from Road (Grade II) • Registered Historic Battlefield of Winnick 	In	Potential temporary noise/ vibration effects as a result of construction activity and associated increase in traffic; potential direct effects resulting from works to the asset, for example, the relocation of the Grade II listed Memorial and associated repair works; and potential temporary changes to the setting on account of the appearance of cranes and other tall work-site plant in views to and from the receptor.
Non-Designated Heritage Assets within the DCO Site: <ul style="list-style-type: none"> • Parkside Road Bridge 	In	Potential direct effects resulting from potential changes to the bridge during construction.

Impacts	Scoped in or out?	Justification
<p>Designated Heritage Assets surrounding the DCO Site (1km):</p> <ul style="list-style-type: none"> • Newton Park Farmhouse (Grade II) • Barn to East of Newton Park Farmhouse (Grade II) • Barn to North of Woodhead Farmhouse (Grade II) • Woodhead Farmhouse (Grade II) • St Oswald’s Well in Field to South of Woodhead Farmhouse (Grade II and Scheduled Monument) • Wall, Gates and Gate Piers to Front of Kenyon Hall (Grade II) • Holly House (Grade II) • Barrow Farmhouse (Grade II) • Newton-le-Willows Station (Grade II) • Newton Viaduct to West of Station (Grade II) • High Street and Willow Park Conservation Area (inclusive of heritage assets within its boundary) 	<p>In</p>	<p>Potential temporary noise/ vibration effects as a result of construction activity and associated increase in traffic; and potential temporary changes to the setting on account of the appearance of cranes and other tall work-site plant in views to and from the receptor.</p>
<p>Non-Designated Heritage Assets surrounding the DCO Site (1km):</p> <ul style="list-style-type: none"> • Highfield Farm Barn • Railway Connecting Manchester to Liverpool Line (Chat Moss Line) with the Warrington to Preston Line 	<p>In</p>	<p>Potential temporary noise/ vibration effects as a result of construction activity and associated increase in traffic.</p>

Impacts	Scoped in or out?	Justification
<ul style="list-style-type: none"> • Kenylo Bridge, Sandy Brow Lane (LLB) • Oven Back Farm (LLB) • Gerosa Avenue (LLB) • Rose Mount Terrace (LLB) • Monk House (LLB) • The Cottage (LLB) • Pipers Hole Cottage (LLB) 		
<p>Designated Heritage Assets surrounding the DCO Site (1km), unlikely to be affected:</p> <ul style="list-style-type: none"> • Bowl Barrow West of Highfield Lane (Scheduled Monument) • Castlehill Motte and Bailey and Bowl Barrow (Scheduled Monument) 	Out	<p>Limited, temporary noise/ vibration and visual effects during construction. There are no above ground features of the DCO Site that contribute to the understanding and appreciation of the significance of these assets. Both assets already sit in a much-altered landscape, separated from the DCO Site by the M6, built development and railway infrastructure. Therefore, the Proposed Development is unlikely to affect the value or appreciation of value of these assets.</p>
<p>Non-Designated Heritage Assets surrounding the DCO Site (1km), unlikely to be affected:</p> <ul style="list-style-type: none"> • No. 149 Mill Lane • The Millstone Public House • Nos. 45-51 Golborne Dale Road No. 6 Bull Houses • Nos. 18-14 Bull Houses • Highfield, Kenyon Lane (LLB) 	Out	<p>The nature of the value of these assets is not judged to merit consideration in the decision-making process, as per NPSNN para. 5.209. Likely to have limited intervisibility (as shown at Figure 11.2), the immediate setting would not be affected and of low to very low value, therefore unlikely to be significant effects in EIA terms (as per the methodology in this Chapter).</p>
<p>Operation</p>		
<p>Designated Heritage Assets within the DCO Site:</p> <ul style="list-style-type: none"> • Huskisson Memorial on South Side of Railway 60 Metres from Road (Grade II) • Registered Historic Battlefield of Winnick 	In	<p>Direct effects potentially resulting from the proposed dismantling, rebuilding and relocation of the receptor. Effects to the setting of the asset resulting from its relocation and development within its setting.</p>

Impacts	Scoped in or out?	Justification
Non-Designated Heritage Assets within the DCO Site: <ul style="list-style-type: none"> • Parkside Road Bridge 	In	Potential direct effects resulting from potential changes to the bridge.
Designated Heritage Assets surrounding the DCO Site (1km): <ul style="list-style-type: none"> • Newton Park Farmhouse (Grade II) and Barn to East of Newton Park Farmhouse (Grade II) • Woodhead Farmhouse (Grade II) and Barn to North of Woodhead Farmhouse (Grade II) • St Oswald’s Well in Field to South of Woodhead Farmhouse (Grade II and Scheduled Monument) • Wall, Gates and Gate Piers to Front of Kenyon Hall (Grade II) • Holly House (Grade II) • Barrow Farmhouse (Grade II) • Newton-le-Willows Station (Grade II) • Newton Viaduct to West of Station (Grade II) • High Street and Willow Park Conservation Area (inclusive of heritage assets within its boundary) 	In	Potential indirect effects from changes to the setting and encroachment on farmland associated with the heritage asset through the addition of development. Limited change from the existing lack of historic and experiential association between the DCO Site and the asset. Potential for visual effects arising from intervisibility between the asset and the Proposed Development, albeit unlikely to be significant effects. Potential for changes to the historic railway associated with selected heritage assets through the reconfiguration of the railway line.
Non-Designated Heritage Assets surrounding the DCO Site (1km): <ul style="list-style-type: none"> • Highfield Farm Barn • Railway Connecting Manchester to Liverpool Line (the Chat Moss Line) 	In	Potential effects through changes to the setting and encroachment on farmland associated with this heritage asset through the addition of development. Potential changes to the setting associated with selected heritage assets through the addition of development.

Impacts	Scoped in or out?	Justification
<p>with the Warrington to Preston Line (West Coast Mainline)</p> <ul style="list-style-type: none"> • Kenylo Bridge, Sandy Brow Lane (LLB) • Oven Back Farm (LLB) • Gerosa Avenue (LLB) • Rose Mount Terrace (LLB) • Monk House (LLB) • The Cottage (LLB) • Pipers Hole Cottage (LLB) 		
<p>Designated Heritage Assets surrounding the DCO Site (1km), unlikely to be affected:</p> <ul style="list-style-type: none"> • Bowl Barrow West of Highfield Lane (Scheduled Monument) • Castlehill Motte and Bailey and Bowl Barrow (Scheduled Monument) 	Out	<p>There are no above ground features of the DCO Site that contribute to the understanding and appreciation of the significance of these assets. Both assets already sit in a much-altered landscape, separated from the DCO Site by the M6, built development and railway infrastructure. Therefore, the Proposed Development is unlikely to affect the value or appreciation of value of these assets.</p>
<p>Non-Designated Heritage Assets surrounding the DCO Site (1km), unlikely to be affected:</p> <ul style="list-style-type: none"> • No. 149 Mill Lane • The Millstone Public House • Nos. 45-51 Golborne Dale Road No. 6 Bull Houses • Nos. 18-14 Bull Houses • Highfield, Kenyon Lane (LLB) 	Out	<p>The nature of the significance of these assets is not judged to merit consideration in the decision-making process, as per NPSNN para.5.209. Likely to have limited intervisibility (as shown at Figure 11.2), the immediate setting would not be affected and of low to very low value, therefore unlikely to be significant effects in EIA terms (as per the methodology in this Chapter).</p>

Chapter 12 ◆ Archaeology

INTRODUCTION

- 12.1 This chapter presents the scope of the forthcoming detailed environmental assessment for Archaeology, which will assess the below-ground historical assets and the potential impact on them arising from the Proposed Development. Historic structures will be considered within the archaeological assessment only where they add to the context and to the archaeological potential for associated buried remains. This chapter presents the policy and legislative context, the approach to collecting baseline data and an overview of the relevant baseline conditions within the DCO Site. It sets out the scope of assessment including, with justification, assets that are proposed to be scoped in for detailed assessment and concludes by outlining the method that will be used to undertake the detailed assessment.
- 12.2 Built Heritage is considered separately in Chapter 11 of the Scoping Report and will focus on the standing structures such as historic buildings, monuments and landmarks, their setting and conservation.
- 12.3 In line with the EIA Regulations, this Scoping Report chapter has been compiled by appropriately qualified, experienced, and competent experts. This chapter has been prepared by Icen Projects and is authored by Giulia Rossi PhD, PCIfA, Senior Archaeologist, and reviewed by Phil Stastney PhD MCIfA, Senior Project Manager - Archaeology. Icen Archaeology has Registered Organisation (RO) status with the Chartered Institute for Archaeologists (CIfA).

RELEVANT LAW, POLICY AND GUIDANCE

- 12.4 In assessing the likely effects of the Proposed Development on archaeology receptors, the intention is to identify how, and to what degree, it would affect the significance of the identified archaeological assets. The DCO will be assessed against the Infrastructure Planning (Decisions) Regulations 2010 and National Networks National Policy Statement ('NPSNN', adopted 2024). The National Planning Policy Framework ('NPPF', 2023) and relevant local planning policy are material considerations. The methodology for the assessment of potential effects on designated and non-designated heritage assets takes into account the following legislation, policy and guidance:

Legislation

- Ancient Monuments and Archaeological Areas Act 1979 – Part I Ancient Monuments: Protection of Scheduled Monuments
- Infrastructure Planning (Decisions) Regulations 2010

National Planning Policy

- National Networks National Policy Statement ('NPSNN', adopted 2024)
- National Planning Policy Framework ('NPPF', 2023)

Local Planning Policies and Guidance

- 12.5 St Helens Borough Council Local Plan Up to 2037 (adopted 2022) - specific reference to LPC11: Historic Environment
- 12.6 Places for Everyone Joint Development Plan Document for Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Tameside, Trafford and Wigan 2022 to 2039 (adopted 2024) - specific reference to Policy JP-P2: Heritage
- 12.7 Wigan Council 'Historic Environment Strategy SPD' (2021)
- 12.8 Wigan Statutory Development Plan comprising: Core Strategy DPD Remaining Policies (March 2024) – specific reference to Policy CP11: Historic Environment
- 12.9 Warrington Borough Council Local Plan 2021/22 - 2038/39 (2023) – specific reference to Policies W5: Warrington's Historic Environment, and DC2: Historic Environment

Other Relevant Guidance

- Planning Practice Guidance (2023) – Historic Environment (2019)
- English Heritage (2008) Conservation Principles, Policies and Guidance
- Historic England (2015), Managing Significance in Decision-Taking in the Historic Environment – Historic Environment Good Practice Advice in Planning: 1. The Historic Environment in Local Plans ('GPA2')
- Good Practice Advice in Planning 3 (GPA3) (2017): The Setting of Heritage Assets
- Historic England (2017), Guidance on Battlefields
- Historic England (2020) Good Practice in Planning 4: Enabling Development and Heritage Assets

Professional Regulations and Standards & Guidance

- Historic England (2022) Planning and Archaeology: Historic England Advice Note 17
- Chartered Institute for Archaeologists (CifA), 2023, Standard for archaeological excavation
- Chartered Institute for Archaeologists (CifA), 2023, Standard for archaeological monitoring and recording
- Chartered Institute for Archaeologists (CifA), 2014, Standard and Guidance for the

Collection, Documentation, Conservation and Research of Archaeological Materials (revised 2020)

- Chartered Institute for Archaeologists (CifA), 2014, Standard and Guidance for Archaeological Field Evaluation (revised 2023)
- Chartered Institute for Archaeologists (CifA), 2014, Code of Conduct (revised 2022)
- Chartered Institute for Archaeologists (CifA), 2014, Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives (revised 2020)
- Chartered Institute for Archaeologists (CifA), 2014, Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials.

CONSULTATION TO DATE

- 12.10 An initial commencement meeting was held between the Applicant (Built Heritage and Archaeology), Historic England and St Helens Council on the 27th of June 2024 to introduce the emerging Proposed Development. However, no formal consultation has been carried out and no formal comments from either Historic England or St Helens Council have been received to this date.
- 12.11 Engagement with relevant stakeholders, including Historic England and archaeological advisory teams to the Local Planning Authorities, will be undertaken throughout the application process, including at key milestones after scoping and PEIR comments received, to discuss key archaeological considerations.
- 12.12 The scope, methodology and results of any archaeological assessment and intervention will be discussed with relevant stakeholders, including Historic England and archaeological advisory teams to the Local Planning Authorities.

BASELINE CONDITIONS AND MAIN ISSUES

Baseline environment

- 12.13 For the purposes of this Scoping Report, the archaeological baseline conditions have been established by carrying out a high-level review of the archaeological dataset relevant to the Proposed Development. The following sources have been utilised to define the baseline of the archaeological assessment:
- Merseyside Historic Environment Record (HER) and Greater Manchester HER;
 - British Geological Survey (BGS) - Solid and Drift geology digital mapping and geological borehole data where applicable;
 - British Geological Society data (geologyviewer.bgs.ac.uk);
 - Geographical and basic topographical layout using Google Maps

(www.google.co.uk/maps) and Light Detection And Ranging (LIDAR) imagery;

- Historic England Aerial Archaeology Mapping Explorer; and,
- Report of previous geophysical survey carried on in the area.

12.14 At present, the following baseline information has been established:

- No World Heritage Sites or Historic Wrecks are located within a 1km radius of the DCO Site.
- The Registered Battlefield of the Battle of Winwick (also known as Battle of Red Bank) 1648 is located directly adjacent to, and partially overlapping with, the western edge of the DCO Site (List Entry Number 1412878). The Registered Battlefield will be considered where it adds to the context assessment and archaeological potential of associated buried remains. Any impact on the above-ground setting of the asset will be addressed in the Built Heritage assessment.
- No Scheduled Monuments are located within the DCO Site. One Scheduled Monument is located within a 1km radius of the DCO Site: ‘Castle Hill Motte and Bailey and Bowl Barrow’ (List Entry Number: 1009867), which is located to the north-west of the DCO Site.
- The ‘Huskisson Memorial on south side of Railway’ is a Grade II Listed Building (List Entry Number: 1075900) located within the northern part of the DCO Site. The Memorial will be considered where it adds to the context assessment and archaeological potential of associated buried remains. Any impact on the above-ground setting of the asset will be addressed in the Built Heritage assessment.
- The site of a medieval park, Newton Park, Newton-in-Makerfield (MHER Monument ID: MME9311), is partially located within the western part of the DCO Site.
- A cropmark interpreted as a possible ring ditch (MME9366) and a Neolithic tree throw (MME22971) are recorded in the MHER north of Rough Farm.
- A possible barrow is recorded in the MHER south of Rough Farm, at the junction of the M6 and Winwick Lane (MME9338).
- Possible Post medieval field boundaries located east of M6 on Newton-in-Makerfield are recorded in the MHER (MME9360 and MME9367).
- A previous geophysical survey covering part of the DCO Site (Figure 12.1) carried out prior to the Parkside Phase 1 development (P/2018/0048/OUP, Stratascan 2007), identified several anomalies of possible archaeological origin, in the form of positive linear and area anomalies indicating the presence of cut features (i.e. pits and ditches). These features are evident within the majority of the survey area; although particular concentrations were noted in the areas north and south of Barrow Lane, and north of Rough Farm, on the southern edge of the DCO Site.

Proposed approach to surveys and further baseline data collection

12.15 The Archaeology ES chapter shall:

- Define the Archaeological baseline conditions;
- Identify relevant Archaeological receptors;
- Assess:
 - The potential for impacts on Archaeological assets throughout the enabling and construction works and resultant effects on Archaeological assets;
 - The likely significant effects on Archaeological assets;
 - Any required mitigation or monitoring to address any likely significant adverse effects on Archaeological assets; and
 - The potential for cumulative effects on Archaeological assets.

12.16 An Archaeological Desk-Based Assessment (DBA) will be undertaken and will form the archaeological baseline for the Environmental Statement (ES) chapter. The DBA will consider data from a Study Area, anticipated to comprise a 1km radius from the DCO Site, to be agreed in consultation with Merseyside Environmental Advisory Service (MEAS) and Greater Manchester Archaeological Advisory Service (GMAAS), which provides archaeological advice to the Local Planning Authorities (LPA), St Helens Borough Council and Wigan Council, respectively. The Inspector of Historic Buildings and Inspector of Ancient Monuments at Historic England will also be consulted.

12.17 The following sources will be consulted in the production of the DBA:

- Merseyside Historic Environment Record (MHER) and Greater Manchester HER Data detailing the results of previous archaeological investigations on the DCO Site and in the surrounding Study Area;
- Historic England – Information on statutory designated assets including the National Heritage List for England (NHLE), World Heritage Sites, Scheduled Monuments, listed buildings, and any identified Heritage at Risk;
- Historic Maps – Ordnance Survey (OS) maps from their historic first edition through to modern OS mapping. Earlier historic maps will also be consulted where available;
- Aerial Photography – Historic and modern aerial photography will be examined using the Historic England Aerial Photo Explorer. Cropmark data will also be obtained from Place Services if required;
- British Geological Survey (BGS) – Solid and Drift geology digital mapping and geological borehole data where applicable;

- Site Reports – Reports on past archaeological investigations within the Study Area; and
- Details of the Proposed Development – Existing and proposed site plans, topographical survey, contamination report, borehole data, existing site services and utilities report.

12.18 The findings from the Desk-Based Assessment will determine the need for targeted archaeological evaluation to support the ES chapter for the DCO submission. We will consult with Historic England and the archaeological advisory teams to the LPAs to discuss scope and methodology of any required archaeological evaluation.

APPROACH AND METHODOLOGY

12.19 The ES chapter will set out an assessment of the impacts of the demolition and construction works associated with the Proposed Development on any identified or potential archaeological remains. This will be followed by an assessment of the overall significance of effect upon archaeological assets, both before and after mitigation. The significance of effect reflects both the importance of the resource and the degree to which the resource would be impacted (i.e. magnitude of impact).

12.20 The ES chapter will provide a reasonable worst-case assessment based on the maximum building envelope, as the construction of the Proposed Development is the time at which archaeological assets (receptors) could be impacted due to associated groundworks.

12.21 The process of impact assessments applied to buried heritage involves the following steps:

- Assessing the potential for unknown archaeological assets based on known baseline preliminary evidence;
- Understanding the archaeological assets. This includes describing the asset, its surroundings and defining its heritage significance (referred to in the ES chapter as ‘sensitivity’ to avoid confusion with the significance of effect);
- Understanding the level and degree of impact (magnitude of change) to the significance of the archaeological asset; and
- Determining the significance of effect on archaeological assets caused by the Proposed Development, by considering the magnitude of the impact and assessing the significance of the change.

12.22 The likely significant effects of the Proposed Development on known archaeological assets as well as currently unknown assets that may be present on the DCO Site will be assessed. A full assessment of the planning policy context at national, and local level will be set out together with the relevant methodology and assessment criteria.

12.23 The ES chapter will present the potential effects associated with the Proposed Development to below ground archaeological assets.

12.24 In line with the NPSNN and NPPF, local planning policies and industry standards and guidance, an Archaeological DBA will be prepared to establish the archaeological significance and value

of known buried heritage assets, the potential for the presence of unknown buried heritage assets and to review the potential impact of the Proposed Development upon any such assets. The DBA will establish the archaeological baseline conditions at the DCO Site.

12.25 Significance values, or **sensitivity**, of an archaeological receptor are guided by its designated status and its heritage interest. Each identified archaeological asset can be assigned a value in accordance with the criteria set out in the NPSNN, Historic England’s ‘Conservation Principles’ and NPPF Annex 2, as per Table 12.1 below. Using professional judgement and the results of consultation with relevant stakeholders, archaeological assets are also assessed on an individual basis. Regional variations and individual qualities are also considered where applicable. This includes aspects such as the regional scarcity of specific asset type, or whether assets can be considered to be of schedulable quality due to them being of national importance.

Table 12.1 Significance/Sensitivity Classification

Value	Description
International / National (very high)	The highest status of asset and indicative of national importance: e.g. World Heritage Sites (WHS), Scheduled Monuments (SMs), Grade I and II* Listed Buildings (LBs), Grade I and II* Registered Parks and Gardens (RPGs), Protected Wrecks, Heritage assets of national importance, well preserved historic landscapes with exceptional coherence, time depth, or other critical factor(s).
National / Regional / County (high)	Archaeological sites that may be designated or undesignated, may contain well preserved or in situ structures, buildings of historical significance, historic landscapes with a reasonably defined extent, or reasonable evidence of occupation/settlement or activities (ritual, industrial etc.). e.g. Grade II RPGs, Conservation Areas (CAs), Designated historic battlefields, Grade II LBs, burial grounds, protected heritage landscapes such as Ancient Woodland, heritage assets of regional or county importance.
Sub-regional / District (medium)	Designated or undesignated archaeological sites with reasonable evidence of human activity. Assets may be of limited historic value but may contribute to district or local

Value	Description
	<p>knowledge and/or research objectives. May contain structures or buildings of potential historic merit.</p> <p>e.g. Historic village settlements, associated historic field systems and boundaries, historic road systems.</p>
Local Area / Parish (Low)	<p>Heritage assets with a local level cultural or education value only</p> <p>e.g. Historic field systems and boundaries, agricultural features such as ridge and furrow, ephemeral archaeological evidence, artefacts of poor contextual stratigraphy.</p>
Negligible	<p>Historic assets with very little or no surviving archaeological interest or stratigraphic integrity. Buildings and landscapes of no historical significance.</p> <p>e.g. Destroyed objects, buildings of no architectural merit, relatively modern landscape features or disturbances such as quarries, field boundaries, drains etc.</p>
Unknown	<p>Insufficient information exists to assess the importance. Significance of below ground archaeological remains is often unknown until their nature and extent</p>

12.26 The assessment of the **magnitude of change** will be made in consideration of any design (embedded, mitigation) or archaeological mitigation, as per Table 12.2 below. Any impact upon archaeological assets can be positive or negative; direct or indirect; and/or cumulative. Impacts can affect the physical fabric of the asset or their setting. Direct physical impacts are considered permanent and result in the total, or partial loss of a buried heritage asset;

Table 12.2 Magnitude of Change

Value	Description
High	<p>Change such that the value of the heritage asset is totally altered or destroyed through physical impact or comprehensive alteration to its setting affecting its value, seriously impeding the ability to understand and appreciate the asset.</p>

Value	Description
Medium	Change such that the heritage value of the asset is affected due to alterations to its physical form or noticeable change to its setting through alterations resulting in erosion in the ability to understand and appreciate the asset.
Low	Change such that the heritage value of the asset is slightly affected through physical alteration to its physical form or slight change to its setting affecting the ability to understand and appreciate the asset.
Very Low	Changes that barely affect the value of the asset or its setting, resulting in no real change in the ability to understand and appreciate the asset.
No Change	No alteration or change to the value of the asset or its setting.

12.29 The **significance of effect**, intended as the overall effect on the asset caused by any impact arising from the Proposed Development is determined by consideration of the **significance/sensitivity** of the asset and the **magnitude of the impact**, with a level of professional judgement included in the determination, as per Table 12.3. This is identified by the degree of change that would be experienced by the asset and its setting if the Proposed Development were to be completed as compared with a ‘do nothing’ situation. Effects can be neutral, adverse, or beneficial. Residual major or moderate effects are deemed to be ‘significant’ for the purposes of the EIA Regulations, in accordance with standard EIA practice. Minor and negligible effects are deemed to be ‘not significant.’

Table 12.3 Significance of Effect

	Magnitude of Change				
Value	High	Medium	Low	Very Low	No Change
Very High	Major	Major	Moderate	Moderate	Neutral
High	Major	Moderate	Minor	Minor	Neutral
Medium	Moderate	Moderate	Minor	Negligible	Neutral
Low	Moderate	Minor	Negligible	Negligible	Neutral

	Magnitude of Change				
Value	High	Medium	Low	Very Low	No Change
Very Low	Minor	Negligible	Negligible	Negligible	Neutral

PRELIMINARY ASSESSMENT OF POTENTIAL EFFECTS

12.30 A desk based high-level review of the publicly available information has been carried out to assess the potential archaeological constraints across the Proposed Development.

12.31 The potential sensitive receptors include all of the designated and undesignated archaeological assets within the Study Area and all the known and as-yet unknown archaeological assets within the DCO Site to be identified as part of the DBA.

12.32 The following known archaeological receptors are located within the DCO Site and are shown in Figure 12.2:

- Any buried remains associated with the Grade II Listed Huskisson Memorial (List Entry Number: 1075900);
- Any buried remains associated with the Registered Battlefield of the Battle of Winwick (also known as Battle of Red Bank) 1648 (List Entry Number 1412878);
- Any buried remains associated with the site of the medieval Newton Park (MHER Monument ID: MME9311);
- Any buried remains associated with the known archaeological features recorded in the MHER (MME22971, MME9338, MME9360 and MME9367).

PROPOSED AVOIDANCE AND MITIGATION MEASURES

12.33 An appropriate mitigation strategy will be identified, discussed and agreed as appropriate. All work will be undertaken in consultation with the archaeology advisory teams to the LPAs and with the Inspectors at Historic England. This will be further detailed in the baseline reporting.

12.34 It is expected that the following industry-wide recognised archaeological mitigation measures will be included in the program of archaeological mitigation in excess of the embedded mitigation included in the Construction Environmental Management Plan (CEMP) and Construction Traffic Management Plan (CTMP) and will be applied to as forms of control and mitigation over any potential impact on buried heritage assets, depending on their significance and the extent of the Proposed Development’s impacts:

- Archaeological excavation or strip, map and record excavation;

- Archaeological watching brief; and

12.35 A further review of the archaeological mitigation strategies to be implemented during the different phases of the Proposed Development, and how these will be applied to the different receptors will be included in the ES chapter, when there is more information about the actual archaeological survival on DCO Site (via field evaluation) and the extent of the impacts of the Proposed Development.

UNCERTAINTIES

12.36 Archaeological desk-based assessments are based on factual archaeological data, yet given the nature of buried archaeological remains, they are speculative pieces of work. The true archaeological potential of any site can only be determined via a programme of field evaluation, such as geophysical survey and archaeological trial trenching.

12.37 At the current stage, a conservative worst-case scenario has been applied whereby all the archaeological remains within the DCO Site will be entirely removed.

SUMMARY OF PROPOSED EIA SCOPE

12.38 All effects that may result in a high magnitude of change to any known or unknown archaeological remains within the DCO Site will be scoped into the assessment. This will primarily consist of works that penetrate the ground surface as they have the potential to damage and/or remove archaeological deposits, features and finds. These will likely all occur during the enabling and construction works and include activities such as (but not limited to) piling, excavation of service trenches, foundations or any other element, probing, coring, ground levelling, road and railway construction, compound construction, below ground demolition.

12.39 The level of impact on archaeological heritage receptors will be fully assessed and the results included within the ES chapter. Where possible there will be an attempt to mitigate by design any impacts on particularly sensitive assets. Where adverse effects on sensitive receptors are determined to be ‘significant’ for the purposes of the EIA Regulations, then they will be subject to further mitigation and justification.

Table 12.4 Summary of Archaeology impacts proposed to be scoped in and out of the EIA

Impacts	Scoped in or out?	Justification
Construction		
Prehistoric Remains	In	Construction phase works which results in below ground impacts and/or landscaping has the potential to effect buried archaeological remains.

Impacts	Scoped in or out?	Justification
Roman Remains	In	Construction phase works which results in below ground impacts and/or landscaping has the potential to effect buried archaeological remains.
Medieval Remains	In	Construction phase works which results in below ground impacts and/or landscaping has the potential to effect buried archaeological remains.
Post-medieval Remains	In	Construction phase works which results in below ground impacts and/or landscaping has the potential to effect buried archaeological remains.
Operation		
Prehistoric Remains	Out	It is anticipated that during the operation of the Proposed Development there will be no below ground works. Therefore, there will be no affect to archaeological receptors and as such there will be no likely significant effects to buried heritage once the Proposed Development is complete and operational.
Roman Remains	Out	It is anticipated that during the operation of the Proposed Development there will be no below ground works. Therefore, there will be no affect to archaeological receptors and as such there will be no likely significant effects to buried heritage once the Proposed Development is complete and operational.
Medieval Remains	Out	It is anticipated that during the operation of the Proposed Development there will be no below ground works. Therefore, there will be no affect to archaeological receptors and as such there will be no likely significant effects to buried heritage once the Proposed Development is complete and operational.
Post-medieval Remains	Out	It is anticipated that during the operation of the Proposed Development there will be no below ground works. Therefore, there will be no affect to

Impacts	Scoped in or out?	Justification
		archaeological receptors and as such there will be no likely significant effects to buried heritage once the Proposed Development is complete and operational.

Chapter 13 ◆ Hydrology

INTRODUCTION

- 13.1 An assessment will be undertaken of the likely significant effects of the Proposed Development on the environment, with respect to flood risk and surface water.
- 13.2 The assessment will be supported and informed through consultations with various stakeholders, including the Environment Agency (EA), the Lead Local Flood Authority (LLFA) and United Utilities, the statutory water undertaker for the area. Reference will be made to relevant national and local planning and legislative policy.
- 13.3 A standalone Flood Risk Assessment (FRA) report will also be prepared, as well as a Sustainable Drainage Statement (SDS) report which will include a proposed surface and foul water drainage strategy. These will form appendices to the Environmental Statement (ES).
- 13.4 In line with the EIA Regulations, this Scoping Report chapter has been compiled by appropriately qualified, experienced, and competent experts. The author of this chapter is Sian Renwick MSci (Hons) GradCIWEM, a Flood Risk Consultant. This chapter has been reviewed by Claire Gardner BSc (Hons) MSc MCIWEM C.WEM ACMI fCMgr.

RELEVANT LAW, POLICY AND GUIDANCE

- 13.5 The DCO will be assessed against the Infrastructure Planning (Decisions) Regulations 2010 and National Networks National Policy Statement ('NPSNN', adopted 2024). The assessment will be undertaken in accordance with the relevant national and local planning and legislative policy, specifically:

Water Resources Act

- 13.6 The Water Resources Act¹ relates to the control of the water environment. The main aspects of the Act which are relevant to the whole Intermodal Logistics Park North Rail Freight Interchange (ILPN RFI) include provisions concerning land drainage, flood mitigation and controlling discharges to watercourses to prevent water pollution. It also outlines the functions and responsibilities of the EA in regulating the water environment.

Flood and Water Management Act

- 13.7 The Flood and Water Management Act² takes forward some proposals previously published by the UK Government: Future Water, Making Space for Water and the UK Government's

¹ The Water Resources Act 1991

² Flood and Water Management Act (2010)

response to Sir Michael Pitt’s Review of the summer 2007 floods.

- 13.8 The Act gives the EA the strategic overview of management of flood risk in England. It gives upper tier local authorities in England responsibility for preparing and putting in place strategies for managing flood risk from groundwater, surface water and ordinary watercourses in their areas.
- 13.9 Local flood authorities, district councils, internal drainage boards and highways authorities have a duty to aim to make a contribution towards sustainable development.

National Networks National Policy Statement

- 13.10 The National Networks National Policy Statement (NPSNN)³ provides the planning policy, for nationally significant infrastructure road, rail and strategic rail freight interchange projects.
- 13.11 Paragraphs 5.126 to 5.151 (related to flood risk) and 5.252 to 5.268 (related to water quality and resources) include the requirements to:
- *‘take the impacts of climate change into account’.*
 - undertake an appropriate assessment of flood risk, in accordance with the requirements of the National Planning Policy Framework in order to *‘avoid, limit and reduce the risk of flooding to the proposed infrastructure and others’.*
 - assess potential impacts on potential impacts on water quality, water resources, physical characteristics and waterbodies or protected areas under the Water Framework Directive (WFD) Regulations.

National Planning Policy Framework

- 13.12 The National Planning Policy Framework (NPPF)⁴ sets out the Government’s national policies on different aspects of land use planning, including flood risk.
- 13.13 The accompanying Planning Practice Guidance sets out the vulnerability and suitability of different land uses to flood risk. It encourages development to be located in areas of lower flood risk where possible and stresses the importance of preventing increases in flood risk to the wider catchment.

CIRIA Document C753: The SuDS Manual

- 13.14 The SuDS Manual⁵ provides guidance regarding planning, design, construction and maintenance of Sustainable Drainage Systems (SuDS) to assist with the effective implementation within both new and existing developments.

³ National Networks National Policy Statement (2024)

⁴ National Planning Policy Framework (2023)

⁵ CIRIA C753 The SuDS Manual, B. Woods Ballard, S. Wilson, H. Udale-Clarke, S. Illman, T. Scott, R. Ashley. R. Kellagher (2015)

Design Manual for Roads and Bridges LA 113 Road drainage and the water environment

13.15 This Standard⁶ gives guidance on the assessment and management of the impacts that road projects may have on the water environment. These include possible impacts on the quality of water bodies and on the existing hydrology of the catchment(s) through which roads pass. The Standard may also be applied to existing roads, where appropriate.

Water Framework Directive

13.16 The Water Framework Directive (WFD)⁷ applied to all waterbodies within European Union (EU member states at the time. The Water Environment (Water Framework Directive) (England and Wales) Regulations (2017) transposed the requirements of the WFD into UK law and has been retained post-Brexit. The Regulations aim to ensure the protection of waterbodies from further deterioration, and that improvements in water quality are made. The assessment and protection of waterbodies is undertaken by implementing River Basin Management Plans (RMBP). In general terms, there is an onus on developers to protect and, if possible, enhance waterbodies close to proposed developments.

13.17 Eleven River Basin Districts have been identified in England and Wales, and the DCO Site falls within the North West River Basin District. The Regulations include a requirement for surface water bodies to achieve 'good' status with respect to ecology and water chemistry by 2021. Progress is monitored by the EA in its role as the 'competent authority'. The current plan relevant to the Study Area is the North West River Basin District River Basin Management Plan 2022 - 2027.

Preliminary Flood Risk Assessment

13.18 A Preliminary Flood Risk Assessment (PFRA) is an assessment of floods that have taken place in the past and floods that could take place in the future. It generally considers flooding from surface water runoff, groundwater and ordinary watercourses, and is prepared by LLFAs.

13.19 The St Helens Council PFRA⁸ was completed in June 2017. The PFRA seeks to assess past and future flood risk and identify areas at significant flood risk.

13.20 The Wigan Council PFRA⁹ was completed in May 2011 and an addendum¹⁰ was published in December 2017.

13.21 The Warrington Borough Council PFRA¹¹ was published in May 2017.

⁶ Design Manual for Roads and Bridges LA 113 Road Drainage and the Water Environment, Highways England (2020)

⁷ Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy

⁸ Preliminary Flood Risk Assessment 2017-2023, St Helens Borough Council (2017)

⁹ Wigan Council Preliminary Flood Risk Assessment, JBA Consulting (2011)

¹⁰ Addendum to Preliminary Flood Risk Assessment, Wigan Metropolitan Borough Council (2017)

¹¹ Warrington Preliminary Flood Risk Assessment 2017-2023, Warrington Borough Council (2017)

Local Flood Risk Management Strategy

- 13.22 A Local Flood Risk Management Strategy (LFRMS) is prepared by a LLFA to help understand and manage flood risk at a local level. The LFRMS aims to ensure that the knowledge of local flood risk issues is communicated effectively so floods can be better managed. The LFRMS also aims to promote sustainable development and environmental protection.
- 13.23 The St Helens Council LFRMS¹², the Wigan LFRMS¹³ and the Warrington LFRMS¹⁴ were written to assist in the understanding and management of flood risk in the respective boroughs.

Strategic Flood Risk Assessment

- 13.24 A Strategic Flood Risk Assessment (SFRA) is a study carried out by one or more local planning authorities to assess the risk to an area from flooding from all sources, now and in the future.
- 13.25 The St Helens Council SFRA¹⁵ was completed in September 2014. The SFRA aims to provide an assessment of flood risk from all sources within the council's administrative area.
- 13.26 A Liverpool City Region Combined Authority SFRA Part A¹⁶ was completed in November 2023. This is a joint SFRA for the combined authority and covers the administrative area of St Helens Borough Council.
- 13.27 An updated Level 1 SFRA for Greater Manchester¹⁷ was completed in March 2019. This document updates a previously completed Level 1 SFRA and covers the Wigan Council administrative area. Following this, a Greater Manchester Level 2 Hybrid Strategic Flood Risk Assessment¹⁸ was completed in October 2020.
- 13.28 The Warrington Borough Council Level 1 SFRA¹⁹ was completed in July 2018 and the Level 2 SFRA²⁰ was completed in March 2019. An addendum to the SFRA²¹ was published in August 2021.

St Helens Borough Local Plan

- 13.29 The St Helens Borough Local Plan²² was adopted in July 2022 and sets out the vision, objectives and strategic and local policies for development in the Borough up to 2037. The key policy from the Local Plan relevant to water resources and flood risk is Policy LPC12 (Flood Risk and Water Management). This policy sets out requirements for new developments with respect to flood risk, water quality and sustainable drainage systems.

¹² Local Flood Risk Management Strategy 2019-2025, St Helens Council (2020)

¹³ Wigan Local Flood Risk Management Strategy, Wigan Council (2018)

¹⁴ Local Flood Risk Management Strategy 2017-2023, Warrington Borough Council (2017)

¹⁵ St Helens Council Strategic Flood Risk Assessment, JBA Consulting (2014)

¹⁶ Liverpool City Region Combined Authority Strategic Flood Risk Assessment Part A, JBA Consulting (2023)

¹⁷ Level 1 Strategic Flood Risk Assessment for Greater Manchester – Update, JBA Consulting (2019)

¹⁸ Greater Manchester Level 2 Hybrid Strategic Flood Risk Assessment, JBA Consulting (2020)

¹⁹ Warrington Borough Council Level 1 Strategic Flood Risk Assessment, JBA Consulting (2018)

²⁰ Warrington Borough Council Local Plan Site Screening Level 2 Strategic Flood Risk Assessment, JBA Consulting (2019)

²¹ Warrington Borough Council Strategic Flood Risk Assessment Addendum, Warrington Borough Council (2021)

²² St Helens Borough Local Plan up to 2037, St Helens Borough Council (2022)

Greater Manchester Places for Everyone Plan

- 13.30 The Places for Everyone Plan²³, adopted in March 2024, is a joint development plan encompassing the nine Greater Manchester districts, including Wigan. A key policy of relevance is Policy JP-S4: Flood Risk and the Water Environment. This policy sets out the need for development to be located and designed *'to minimise the impacts of current and future flood risk'* as well as expectations for the use of sustainable drainage systems.
- 13.31 Policy JP-G4: Lowland Wetlands and Mosslands is also of relevance, due to the Highfield Moss Site of Special Scientific Interest (SSSI) located immediately adjacent to the DCO Site. In particular, it is stated that land adjacent to sensitive wetland habitats should be positively managed in such a way that their hydrology is not adversely affected.

Wigan Local Plan Core Strategy

- 13.32 Whilst a number of policies from the Wigan Local Plan Core Strategy²⁴ have been superseded by the Places for Everyone DPD (adopted March 2024), Policy CP 16 (Flooding) is saved. The policy sets out the requirements for development with regards to flood risk and surface water run-off.

Warrington Local Plan

- 13.33 The Warrington Local Plan 2021/22 to 2038/39²⁵ was adopted in December 2023 and provides the statutory planning framework for the Borough until 2039. The key policy from the Local Plan relevant to water resources and flood risk is Policy ENV2 - Flood Risk and Water Management. This policy sets out general principles for development with relation to flood risk as well as specific requirements for development proposals.

North West River Basin Management Plan

- 13.34 The latest version of the North West RBMP was published in 2022. RBMPs include an assessment of river basin characteristics, a review of the impact of human activities, statuses of water bodies and an economic analysis of water use and progress since the first plan was published in 2009.

United Utilities Water Resources Management Plan

- 13.35 The Water Resources Management Plan²⁶ is a long-term assessment of the likely demand and supply of potable water within the United Utilities supply region. The document also includes an outline of plans in order to balance supply and demand, whilst meeting environmental obligations and climate change uncertainty.

²³ Places for Everyone Joint Development Plan Document for Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Tameside, Trafford and Wigan 2022 to 2039, Greater Manchester Combined Authority (2024)

²⁴ Wigan Local Plan Core Strategy Remaining Policies, Wigan Council (2024)

²⁵ Warrington Local Plan 2021/22 to 2038/39, Warrington Borough Council (2023)

²⁶ Final Water Resources Management Plan 2019, United Utilities (2019)

CONSULTATION TO DATE

- 13.36 The assessment will be supported and informed through consultations with various stakeholders, including but not limited to the EA, St Helens Borough Council and other relevant LLFAs and United Utilities. This will comprise both direct consultation with the technical team and wider consultations which will be undertaken as part of the DCO process.
- 13.37 An introductory meeting with the EA took place on 12th July 2024. The role of the EA and of LLFAs, as a statutory consultee and as non-statutory consultees respectively, was discussed.
- 13.38 Preliminary consultation with St Helens Borough Council, as the LLFA responsible for the St Helens land contained within the draft Order Limits, has been undertaken to date. A meeting was attended by representatives of the LLFA and the Local Planning Authority on 12th August 2024. The DCO application process was discussed, including the role of the LLFA and the EA as consultees, as well as the proposed hydraulic modelling and likely surface water drainage strategy.

BASELINE CONDITIONS AND MAIN ISSUES

Baseline environment

Hydrology

- 13.39 The majority of the DCO Site is located within the Spittle Brook catchment.
- 13.40 An unnamed tributary of the Cockshot Brook flows in a south-easterly direction to the south of the DCO Site, beyond the A579. There are no Ordinary Watercourses located within the DCO Site.
- 13.41 There are surface water drainage features within the DCO Site, such as attenuation features and swales associated with the recently constructed Parkside Link Road. There are small ponds in the north-east of the DCO Site, which are also anticipated to ultimately outfall into the Cockshot Brook.
- 13.42 There are also ditches present along the northern boundary, adjacent to the Highfield Moss SSSI.
- 13.43 The western extents of the DCO Site fall within the Millingford (Newton) Brook catchment.
- 13.44 The DCO Site is located within Zone III (Total Catchment) of a groundwater source protection zone (GSPZ). The DCO Site is also partially located within a Drinking Water Safeguard Zone for groundwater.

Flood Risk

- 13.45 The EA's Flood Map for Planning (Figure 13.1) shows the entirety of the DCO Site to be in Flood Zone 1 (defined as land having a less than 1 in 1,000 annual probability of fluvial or tidal flooding). The nearest EA Flood Zone extents are located approximately 60m west of the DCO Site, associated with the Newton Brook.

- 13.46 The EA's Risk of Flooding from Surface Water map (Figure 13.2) shows various areas of the DCO Site to be at 'low', 'medium' and 'high' risk of surface water flooding. Areas indicated to be at potential risk of surface water flooding generally correlate with the location of existing surface water bodies and existing topographical low points.
- 13.47 The nearest canal is located approximately 3.8km north of the DCO Site. Given the distance between the canal and the DCO Site as well as the intervening topography, the DCO Site is considered to be at low risk of flooding from canals.
- 13.48 The nearest reservoir is located approximately 260m north of the DCO Site. The DCO Site is outside of an area at risk of inundation in the event of reservoir failure.
- 13.49 As such, other sources of flood risk, such as reservoirs and canals, are not considered to affect the DCO Site and will also not be affected by the Proposed Development.
- 13.50 A standalone FRA will accompany the DCO application, in line with Paragraph 5.131 of the NPSNN, which will assess flood risk in more detail. A draft FRA will be prepared and consulted upon as part of the PEIR.

Surface water

- 13.51 The DCO Site is understood to currently not be served by a positive surface water drainage system. This is with the exception of the recently constructed Parkside Link Road, which has associated surface water drainage features.
- 13.52 Rainfall is believed to infiltrate into the ground where geological and hydrogeological conditions allow, and then to runoff at surface level once the infiltration capacity of the ground has been exceeded. Any run-off currently generated will likely be directed to local surface water bodies, and ultimately into the Cockshot Brook, the Newton Brook and associated tributaries.

Water Quality

- 13.53 The Spittle Brook catchment has a WFD overall waterbody quality classification of 'moderate', with an ecological status of 'moderate' and a 'fail' chemical status. The catchment has a WFD objective of achieving 'good' overall and ecological statuses by 2027.
- 13.54 The Millingford (Newton) Brook catchment also has a WFD overall waterbody quality classification of 'moderate', with an ecological status of 'moderate' and a 'fail' chemical status. The catchment has an objective of achieving 'good' overall and ecological statuses by 2027.
- 13.55 With regards to groundwater, the DCO Site is within the Lower Mersey Basin and North Merseyside Permo-Triassic Sandstone Aquifers catchment. This groundwater catchment has a WFD overall waterbody quality classification of 'poor'.

Foul Water

13.56 The DCO Site is located within United Utilities' sewerage area, although it is not believed to be served by a public foul water drainage system at present. Foul water from existing properties within the DCO Site is expected to currently be disposed to on-site management / disposal systems.

Potable Water Supply

13.57 Potable water is supplied to the area by United Utilities. The EA classifies the United Utilities region as being 'not seriously water stressed', although it is noted that a degree of pressure on water resources may still be present.

Other Designations

13.58 Highfield Moss SSSI is located between the northern boundary of the draft Order Limits and the Chat Moss Line to the north. The SSSI is a lowland raised valley mire and part of the Greater Manchester Wetlands area. The SSSI currently has an '*Unfavourable – Recovering*' assessment description according to Natural England²⁷.

Proposed approach to surveys and further baseline data collection

13.59 The ES Chapter will be informed by the following assessments:

- Flood Risk Assessment (FRA);
- Sustainable Drainage Statement (SDS), including Surface and Foul Water Drainage Strategy;
- Water Framework Directive (WFD) Screening Assessment; and
- Hydraulic modelling of the surface water flow routes within the DCO Site.

13.60 Further baseline data collection will be undertaken to inform the ES Chapter and assessments outlined above, including but not limited to:

- Topographical survey; and
- Ground investigation reports, including results of groundwater monitoring.

APPROACH AND METHODOLOGY

Assessment Area

13.61 The Study Area (Figure 13.3) for this assessment will comprise the DCO Site but will extend to include the Highfield Moss SSSI. There are potential significant receptors that exist beyond these limits as well as cumulative impacts which will also be included in the assessment.

²⁷ Designated Sites View: Highfield Moss SSSI, Natural England,
<https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s1002768> (accessed 26/09/2024)

These include flood risk and drainage pathways between the DCO Site and potential receptors such as the tributary of the Cockshot Brook, the Newton Brook, sewerage system and groundwater. These additional receptors will be defined through the work undertaken for the EIA process.

Approach and Methodology

- 13.62 The significance of potential effects arising from the Proposed Development will be established through a combination of identifying receptor sensitivity and determining the magnitude of potential effects.
- 13.63 The assessment will consider the construction and operation stages of the Proposed Development over its lifetime, i.e., taking account of the potential influence of climate change on the surface water and flood risk receptors under consideration.
- 13.64 The sensitivity of the resource will be assessed according to the definitions of receptor sensitivity in Table 13.1 using best practice methodologies and will consider the quality, rarity and sensitivity of the resource changing.

Table 13.1 Definition of Receptor Sensitivity

Value / Sensitivity	Criteria	Examples
High	<p>Water environment features with a very high yield, quality or rarity with little potential for substitution.</p> <p>Water resources supporting human health and economic activity at a regional scale.</p> <p>Features with a very high vulnerability to flooding.</p>	<p>Surface water WFD class ‘High’.</p> <p>Conditions supporting sites with international conservation designations (Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar) where the designation is based specifically on the water features.</p> <p>Groundwater resource in Zone 1 of a GSPZ. Principal aquifer providing regionally important resource or supporting a site protected under EC or UK habitat legislation/species protected by EC or UK legislation.</p> <p>Land use types defined as ‘Essential Infrastructure’ and ‘Highly Vulnerable’ in the NPPF flood risk vulnerability classification.</p>

Value / Sensitivity	Criteria	Examples
		Human Receptors (construction workers, future workers, local residents).
Medium	<p>Water environment features with a high yield, quality or rarity with a limited potential for substitution.</p> <p>Water resources supporting human health and economic activity at a local scale.</p> <p>Features with a high vulnerability to flooding.</p>	<p>Conditions supporting sites with national conservation designations (SSSI, National Nature Reserve (NNR)) where the designation is based specifically on the water features. Species protected under EC or UK habitat legislation.</p> <p>Principal aquifer providing a locally important resource, Groundwater resource in Zone 2 of an GSPZ.</p> <p>Surface water WFD class ‘Good’.</p> <p>Land use types defined as ‘More Vulnerable’ in the NPPF flood risk vulnerability classification.</p>
Low	<p>Features with a moderate or low yield, quality or rarity with some or good potential for substitution.</p> <p>Water resources supporting human health and economic activity at household/individual business scale.</p> <p>Water resources that do not support human health and are of only limited economic benefit.</p>	<p>Sites with local conservation designations (Local Nature Reserves (LNR), County Wildlife Sites) where the designation is based specifically on the water features.</p> <p>Non-reportable or heavily modified WFD river waterbodies. Groundwater outside GSPZ.</p> <p>Surface water WFD class ‘Moderate’ or ‘Poor’.</p> <p>Land use types defined as ‘Less Vulnerable’ or ‘Water-compatible’ in the NPPF flood risk vulnerability classification.</p>

13.65 Impacts will be described as beneficial or adverse, and the potential magnitude of this impact rated from major to negligible / no change (Table 13.2).

Table 13.2 Definition of Beneficial and Adverse Magnitude of Change

Magnitude of Effect	Criteria	Examples
Major (Adverse)	Loss of attribute and / or quality and integrity of the attribute.	Increase in peak flood level (>100mm). Deterioration in surface water ecological or chemical WFD element.
Moderate (Adverse)	Results in an effect on the integrity of an attribute, or loss of part of an attribute.	Increase in peak flood level (>50mm). Measurable decrease in surface water ecological or chemical WFD quality or flow with potential for deterioration in WFD element status.
Minor (Adverse)	Minor change to feature, with insufficient magnitude to affect its use, quality or integrity in most circumstances.	Increase in peak flood level (>10mm). Measurable decrease in surface water ecological or chemical WFD quality or flow.
Negligible / No Change	Little or no change to feature with insufficient magnitude to affect its use, quality or integrity.	Negligible change in peak flood level (< +/-10mm). Discharges to watercourse which lead to no change in the feature's integrity.
Minor (Beneficial)	Some beneficial impact on the feature or a reduced risk of a negative impact occurring.	Creation of additional flood storage and decrease in peak flood level (>10mm). Measurable increase in surface water ecological or chemical quality.
Moderate	Moderate improvement of the	Creation of additional flood storage

Magnitude of Effect	Criteria	Examples
(Beneficial)	feature’s quality.	and decrease in peak flood level (>50mm). Measurable increase in surface water ecological or chemical quality or flow with potential for WFD element status to be improved.
Major (Beneficial)	Results in a large improvement of the attributes quality or creation of new feature.	Creation of additional flood storage and decrease in peak flood level (>100mm). Improvement in surface water ecological or chemical WFD element.

13.66 The significance of the effect will be defined using a matrix of the sensitivity and the magnitude of the impact according to Table 13.3. Effects determined to be moderate or greater will be considered significant in Environmental Impact Assessment (EIA) terms.

Table 13.3 Determination of Significant Effects for Hydrology

	Receptor Value / Sensitivity		
Magnitude	High	Medium	Low
Major	Major	Major	Moderate
Moderate	Major	Moderate	Minor
Minor	Moderate	Minor	Negligible
Negligible	Minor	Negligible	Negligible

13.67 It is proposed that the Hydrology chapter of the ES will assess the following likely significant

effects.

Flood Risk

- 13.68 The assessment of flood risk will primarily be undertaken within the standalone FRA report. This report will assess flood risk from all sources. The findings of the FRA will present an assessment of the flood risk associated with the Proposed Development and likely significant impacts of the Proposed Development on waterbodies.
- 13.69 The detailed FRA will be supported by a bespoke hydraulic study of the pluvial (surface water) flood risk, to confirm its extent and levels, and identify the potential impact of the Proposed Development, and test mitigation options, if required.

Surface Water (Quantity and Quality)

- 13.70 The assessment of surface water risk will be undertaken within the standalone SDS report.
- Quantity: the potential effect of the Proposed Development on the rate and volume of surface water runoff will be determined, and a proposed Surface Water Drainage Strategy prepared to address any adverse impacts.
 - Quality: the potential risk of pollutants being generated as a result of the construction and operation of the Proposed Development will be determined, along with the assessment of potential impacts, and identification of any necessary mitigation measures.

Foul Water (Quantity and Quality)

- 13.71 The assessment of foul water risk will be undertaken within the standalone SDS report.
- Quantity: consultation will be sought with United Utilities to identify any potential infrastructure capacity issues. The potential impact of the Proposed Development on available treatment capacity will then be assessed and mitigation measures proposed, if necessary.
 - Quality: the standard of available foul water treatment infrastructure will be confirmed via consultation with United Utilities. The impact of the Proposed Development will then be ascertained and mitigation measures outlined, if necessary.

Climate Change

- 13.72 The Hydrology chapter of the ES will assess the potential effects of climate change on the Proposed Development and will consider climate change when recommending mitigation measures.

Cumulative Effects

- 13.73 Cumulative effects with other proposed developments will be assessed as part of the EIA

process. This will include consideration of whether the Proposed Development, when considered together with other committed and planned developments, may result in any greater effects on a receptor than the effects of the Proposed Development alone.

PRELIMINARY ASSESSMENT OF POTENTIAL EFFECTS

13.74 The Proposed Development has the potential to have a variety of impacts on Hydrology, both through construction and operational phases, as follows.

Flood Risk

13.75 The construction and operation phases of the Proposed Development have potential for impedance of overland flow routes through the temporary or permanent obstruction of surface water flow routes. Such potential effects could influence the flood risk posed on-site and to downstream third party land.

13.76 The following flood risk effects are proposed to be scoped out:

- coastal;
- canal; and
- reservoir.

13.77 Due to the distance and intervening topography between the DCO Site and coastal and canal flood sources, there is considered to be a negligible risk of flooding from these sources. The DCO Site is outside of an area at risk of inundation in the event of reservoir failure. Therefore, these sources are not considered to affect the DCO Site and will also not be affected by the Proposed Development.

Site Discharges – Quantity

Surface Water

13.78 The Proposed Development will increase the impermeable area and, as such, without appropriate mitigation, has the potential to increase rates and volumes of surface runoff, increasing the likelihood of downstream adverse effects, for example increased flood risk as a result of surcharging waterbodies and / or sewerage systems.

13.79 Without appropriate mitigation, the Proposed Development has the potential to adversely affect Highfields Moss SSSI through alteration of above and / or below ground hydrological connectivity between the DCO Site and the SSSI.

Foul Water

13.80 Foul flow loads on the local area will be increased because of the Proposed Development, which may potentially cause capacity issues in the local sewerage and sewage treatment infrastructure.

Site Discharges – Quality

Surface Water

13.81 The discharge of additional surface water from the DCO Site has the potential to adversely affect water quality in receiving waterbodies, if unmitigated. Surface water discharges have the potential to contain or mobilise pollutant generated as part of construction and operational activities.

Foul Water

13.82 Foul water discharges could adversely affect water quality in receiving waterbodies if not appropriately treated.

Potable Water Supply

13.83 The Proposed Development will involve the use and consumption of potable water, both during construction and operation. This has the potential to adversely affect water resource availability within the region.

PROPOSED AVOIDANCE AND MITIGATION MEASURES

Embedded Mitigation

13.84 The Proposed Development will include a range of ‘embedded’ measures designed to reduce or prevent significant adverse environmental effects arising. In some cases, these measures may result in enhancement of current environmental conditions or help alleviate existing issues. These measures will be refined further through the EIA process and in response to consultation but are expected to include:

- An outline surface water drainage strategy, which will be prepared to provide further details on the measures to manage surface water for the Proposed Development.
- A Construction Environmental Management Plan (CEMP) will be developed in accordance with Guidance for Pollution Prevention 5: works or maintenance in or near water (GPP 5) and will include measures to avoid pollution from concrete use, silt and oil, and chemicals.

13.85 Any additional mitigation to prevent, reduce or offset any likely effects that cannot be avoided through design will be identified through the EIA process.

UNCERTAINTIES

13.86 At the time of preparation of this Scoping Report, with the exception of the introductory meeting with the EA in July 2024 and the meeting with representatives of St Helens LLFA in August 2024, no consultation feedback has been received. Further consultations with stakeholders, including but not limited to the EA, St Helens Borough Council and other relevant LLFAs and United Utilities, will continue to be undertaken to support and inform the

assessment.

- 13.87 The EA’s Risk of Flooding from Surface Water mapping is a strategic scale dataset that may not fully consider the local topography and structures such as culverts. A bespoke, pluvial hydraulic model is being prepared to assess the surface water flood risk to the DCO Site.
- 13.88 Detail on any hydrological connectivity between the DCO Site and Highfield Moss SSSI is currently unknown. Intrusive investigations will determine the location for groundwater monitoring, which will be undertaken to understand ground water levels and connectivity.

SUMMARY OF PROPOSED EIA SCOPE

13.89 Based on the initial baseline assessment and identification of potential environmental effects, Table 13.4 summarises the Hydrology impacts to be scoped into the EIA.

Table 13.4 Summary of Hydrology impacts proposed to be scoped in and out of the EIA

Impacts	Scoped in or out?	Justification
Construction		
Flood risk Surface water – quantity and quality Foul Water – quantity and quality Potable water supply	All to be scoped in, with the exception of flood risk from coastal, reservoir and canal sources.	There is potential for impacts from the Proposed Development during the construction phase, prior to appropriate mitigation. Due to the distance between the DCO Site and coastal and canal sources, as well as the intervening topography, there is considered to be a negligible risk of flooding from these sources. The DCO Site is outside of an area at risk of inundation in the event of reservoir failure. These sources are therefore not considered to affect the DCO Site and will also not be affected by the Proposed Development. As such, flood risk from coastal, canal and reservoir sources are proposed to be scoped out.
Operation		

Impacts	Scoped in or out?	Justification
<p>Flood risk</p> <p>Surface water – quantity and quality</p> <p>Foul Water – quantity and quality</p> <p>Potable water supply</p>	<p>All to be scoped in, with the exception of flood risk from coastal, reservoir and canal sources.</p>	<p>There is potential for the Proposed Development to result in these impacts during the operational phase, prior to appropriate mitigation.</p> <p>Due to the distance between the DCO Site and coastal and canal sources, as well as the intervening topography, there is considered to be a negligible risk of flooding from these sources. The DCO Site is outside of an area at risk of inundation in the event of reservoir failure. These sources are therefore not considered to affect the DCO Site and will also not be affected by the Proposed Development. As such, flood risk from coastal, canal and reservoir sources are proposed to be scoped out.</p>

Chapter 14 ◆ Geology, Soils and Contaminated Land

INTRODUCTION

- 14.1 This chapter identifies the existing ground conditions and associated development constraints, by evaluating the geology at the DCO Site and potential for soil, gas and water contamination and the potential effects on ground conditions during both the construction and operational phase.
- 14.2 A range of potential impacts associated with the construction and operation of the Proposed Development have been considered, including ground contamination, minerals, SSSIs, ground improvement, earthworks, foundation solutions, slope stability and associated geotechnical issues.
- 14.3 In line with the EIA Regulations, this Scoping Report chapter has been compiled by appropriately qualified, experienced, and competent experts. The author of this chapter is Richard Robinson BSc MCIWEM, a Geo-Environmental Consultant with 21 years of industry experience in the UK. This chapter has been reviewed by Chris Rhodes BSc MSc (13 years of relevant UK experience) and approved by Tim Hull BSc MSc CGeol FGS SiLC SQP (24 years of relevant UK experience).

RELEVANT LAW, POLICY AND GUIDANCE

National Legislation

- 14.4 The DCO will be assessed against the Infrastructure Planning (Decisions) Regulations 2010 and National Networks National Policy Statement ('NPSNN', adopted 2024). The National Planning Policy Framework ('NPPF', 2023) and relevant local planning policy are material considerations.

National Policy Statement for National Networks (NPSNN) (2024)

- 14.5 Paragraph 4.46 states:

'Issues relating to discharges, emissions or abstractions from a proposed project which lead to other direct and indirect impacts on air quality, water quality and land quality, or which include noise, light and vibration, may be subject to separate regulation under the pollution control framework or other consenting and licensing regimes. Relevant permissions will need to be obtained for any activities within the development that are regulated under those regimes before the activities can be operated.'

- 14.6 Paragraph 4.50 and 4.51 goes on to state:

'In considering an application for development consent, the Examining Authority and the Secretary of State should consider whether the development itself is an acceptable use of the land, and on the impacts of that use, rather than the control of processes, emissions or discharges themselves. The Secretary of State will assume that the relevant pollution control regime and other environmental regulatory regimes, including those on land drainage, water abstraction and biodiversity, will be properly applied and enforced by the relevant regulator. The Secretary of State should act to complement but not seek to duplicate them.'

'The Secretary of State should be satisfied that development consent can be granted taking full account of environmental effects. This will require close cooperation with the Environment Agency and/or the pollution control authority, and other relevant bodies, such as the Marine Management Organisation, Statutory Nature Conservation Bodies, Drainage Boards, and water and sewerage undertakers, to ensure that in the case of potentially polluting developments, to ensure that:

- *the relevant regulator is satisfied that potential releases can be adequately regulated under the regulatory framework*
- *the effects of existing sources of pollution in and around the site are not such that the cumulative effects of pollution when the proposed development is added would make that development unacceptable, particularly in relation to statutory environmental quality limits'.*

14.7 Paragraphs 5.155 and 5.156 states that:

'Where necessary, land contamination and instability should be considered in respect of new development. Specifically, proposals should be appropriate for the location, including preventing unacceptable risks from land contamination or instability. If land instability and/or land contamination may be an issue, applicants should seek appropriate technical and environmental expert advice from a competent person to prepare and carry out the appropriate assessments. Applicants should consult with the Coal Authority, Environment Agency and Local Authority if necessary.

For developments on previously developed land, applicants should ensure and demonstrate that they have considered the risks posed by land contamination in accordance with the Land Contamination Risk Management (LCRM) guidance. A preliminary assessment of land contamination and/or ground instability should be carried out at the earliest possible stage before a detailed application for development consent is prepared.'

14.8 Paragraph 5.156 states:

'Applicants should ensure that any necessary investigations are undertaken, in accordance with Land Contamination Risk Management guidance, to ascertain the risk from contamination and identify sensitive receptors and that their sites are, and will, remain stable or can be made so as part of the development. The site needs to be assessed in the context of surrounding areas where subsidence, landslides and land compression could threaten the development during its anticipated life or damage neighbouring land or property. This could

be in the form of a land stability or slope stability risk assessment report.'

14.9 Regarding minerals, the statement states in Paragraph 5.191:

'Applicants should safeguard any mineral resources on the proposed site as far as possible.'

National Planning Policy Framework (NPPF) (2023)

14.10 The National Planning Policy Framework (NPPF) (2023) sets out the Government's planning policies for England. It makes the following reference to Contaminated Land and ground conditions in the section entitled Conserving and enhancing the natural environment:

'180. Planning policies and decisions should contribute to and enhance the natural and local environment by:

e) preventing 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. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and

f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.'

14.11 It also makes the following references to ground conditions and pollution:

'Planning policies and decisions should ensure that:

189 a) a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential impacts on the natural environment arising from that remediation);

b) after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990; and

c) adequate site investigation information, prepared by a competent person, is available to inform these assessments.'

Environmental Protection Act 1990

14.12 Part IIA of the EPA¹ describes a regulatory role for Local Authorities in dealing with contaminated land.

¹ Environmental Protection Act 1990

Environment Act 1995

14.13 The Environment Act² creates a system whereby Local Authorities must identify and if necessary, arrange for the remediation of contaminated sites. The provisions are set out in Section 57, which inserts Part IIA into the EPA, 1990. In addition to these requirements, the operation of the regime is subject to regulation and statutory guidance.

Contaminated Land Regulations

14.14 Section 78A(2) of the Environmental Protection Act 1990 provides a definition of what constitutes 'contaminated land' and sets out the responsibilities of the Local Authority and the EA in the identification and management of contaminated land. Harm is defined in section 78A(4) as harm to the health of living organisms or other interference with the ecological systems of which they form part, and in the case of man, includes harm to property.

Land Contamination Risk Management

14.15 LCRM³ is the guidance that the EA expect to be followed in managing risks on sites affected by contamination, The guidance sets out a staged approach to assess risks from contamination, develop a remediation strategy and implement and verify remediation works. In line with the LCRM, the Preliminary Risk Assessment includes a geo-environmental Hazard Identification ('HAZID'), which seeks to list all the suspected contaminant sources, the receptors that might be harmed by those sources and the pathways via which the sources might reach the receptors to cause the harm. The source-pathway-receptor concept is known as a contaminant linkage (formerly a pollutant linkage) and only when a linkage is complete is there any possibility of risk of harm arising. The source-pathway-receptor concept will be assessed through production of a Conceptual Site Model ('CSM').

Construction (Design & Management) Regulations 2015

14.16 The Construction (Design & Management) Regulations⁴ impose explicit duties that exist under the Health and Safety at Work Act⁵ and the Management of Health and Safety at Work Regulations⁶. This requires clients to make suitable arrangements for managing a project to ensure that the construction work can be carried out, so far as reasonably practicable, without risks to the health and safety of any person affected by the project, and to ensure that the arrangements made by other duty holders are sufficient to safeguard the health and safety of those working or those affected by that work.

² Environment Act 1995

³ Land Contamination Risk Management (LCRM) (updated 20 July 2023)
<https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm>

⁴ Construction (Design & Management) (CDM) Regulations 2015

⁵ Health and Safety at Work Act 1974

⁶ Management of Health and Safety at Work Regulations 1999

Local Policy

St Helens Local Plan up to 2037 - Policy LPC06: Biodiversity and Geological Conservation

14.17 In accordance with NPPF the St Helens Local Plan⁷ includes policy for protection and enhancement of biodiversity and geological assets. The Local Plan Policy LPC06: Biodiversity and Geological Conservation:

14.18 *'In accordance with NPPF paragraph 174, the Council is committed to ensuring the protection and enhancement of St Helen's biodiversity and geological assets and interests. In order to do this, the Council will have regard to the following hierarchy of nature conservation sites when making planning decisions, according to their designation as follows:*

- *International and European Sites*
- *Sites of Special Scientific Interest*
- *Local Wildlife Sites*
- *Local Nature reserves*
- *Local Geological Sites*
- *Priority Habitat(s)*
- *Impact on Legal Protected Species and/or priority Species*

14.19 *The following hierarchy of sites and habitats are found in the Borough:*

- *I) International*
- *Functionally Linked Land (FLL) for sites of international nature importance (European Sites) including the Ribble and Alt Estuaries Special Protection Area (SPA), Martin Mere SPA, the Mersey Estuary SPA, Liverpool Bay SPA.*
- *II) National*
- *Sites of national nature importance, which in St Helens Borough include 2 Sites of Special Scientific Interest, Stanley Bank Meadow and Highfield Moss.*
- *III) Local*
- *Sites of local nature and geological importance, which in St Helens Borough include Local Nature Reserves (LNRs), Local Wildlife Sites (LWSs) and Local*

14.20 *Geology Sites (LGSs).*

⁷ St Helens Council Local Plan up to 2037, A Balanced Plan for a Better future, adopted July 2022

In addition, priority habitats and species, and legally protected species'

St Helens Local Plan up to 2037 - Policy LPC14: Minerals

14.21 In accordance with NPPF the St Helens Local Plan⁸ includes policy for safeguarding of minerals supply in the district. The Local Plan Policy LPC14: Minerals states:

'The Council will seek to ensure that the Borough of St Helens provides a steady and adequate supply of minerals to contribute towards local, regional, and national needs. To minimise the need for primary mineral extraction, provision of substitute, secondary or recycled sources will be encouraged in preference to land-won resources. This will include the provision of suitably designed and located temporary materials-recycling facilities on the sites of major demolition or construction projects and suitably designed and located permanent recycling plants for construction and demolition waste.'

St Helens Local Plan up to 2037 - Policy LPD01: Ensuring Quality Development

14.22 This policy sets out the requirements that need to be met or exceeded. Under 2. Environmental Quality, points b), c) and d) refer to contamination:

'b) Minimise and mitigate to acceptable levels any effects that the development may have on... land and / or water pollution (including contamination of soil, surface water and groundwater resources);

c) Ensure that any contamination or ground stability issues that exist on the site of the proposed development would be remediated to an appropriate standard, taking into account its intended use and making use of sustainable remediation technologies; and

d) Include satisfactory arrangements for the disposal of... contaminated surface water.'

Wigan Council Adopted Core Strategy - Policy CP 17 Environmental Protection

14.23 The adopted strategy refers to contaminated land in this policy in Section 3 and 5. It indicates that it will help maintain, enhance and protect the environment by:

'3. Tackling land contamination and land stability issues, primarily on sites affected by past industrial uses and coal mining activities, by promoting the appropriate re-use of sites, supporting the identification of contamination and stability issues and requiring appropriate remediation.

5. Ensuring that new development does not give rise to the pollution of any watercourse, groundwater or mossland or result in the transfer of contaminated run-off to surface water sewers.'

⁸ St Helens Council Local Plan up to 2037, A Balanced Plan for a Better future, adopted July 2022

Guidance / Best Practice

14.24 Other Best Practice guidance which has been referred to include:

- British Standards Institution (BSI): BS 10175:2011+A2:2017, (2017), Investigation of Potentially Contaminated Sites, Code of Practice;
- British Standards Institution (BSI): BS 5930:2015+A1:2020, (2020), Code of Practice for Ground Investigations;
- British Standards Institution (BSI): BS 8485:2015+A1:2019, (2019), Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings;
- British Standards Institution (BSI): BS 8576:2013, (2013), Guidance on Investigations for Ground Gas – Permanent Gases and Volatile Organic Compounds (VOCs);
- British Standards Institution (BSI): BS EN 1997-1:2004+A1:2013, (2013), Eurocode 7: Geotechnical Design – Part 1: General Rules;
- British Standards Institution (BSI): BS EN 1997-2:2007, (2007), Eurocode 7 Geotechnical Design – Part 2: Ground Investigation and Testing;
- Construction Industry Research and Information Association (CIRIA) Report C665, (2007), Assessing Risk Posed by Hazardous Ground Gases to Buildings;
- Construction Industry Research and Information Association (CIRIA) Report C811, (2023), Environmental Good Practice on Site 5th Edition;
- Contaminated Land: Applications in Real Environments (CL:AIRE) Definition of Waste: Development Industry Code of Practice Version 2, (2011);
- Environment Agency Science Report SC050021/SR2, (2009), Human Health Toxicological Assessment of Contaminants in Soil;
- Environment Agency Science Report SC050021/SR3, (2009), Updated Technical Background to the CLEA Model, 2009;
- Environment Agency Science Report SC050021/SR4, (2009), CLEA Software (Version 1.06) Handbook; and
- Environment Agency, The Environment Agency’s approach to groundwater protection February 2018 Version 1.2.

CONSULTATION TO DATE

14.25 No specific consultation directly relevant to this assessment has been undertaken to date.

14.26 Consultation will be undertaken in liaison with the ecology and drainage consultants to agree

the scope of works and assessment required to assess potential impacts to Highfield Moss SSSI with Natural England. Additionally, consultation will be undertaken with the EA groundwater protection team, and the relevant local authority contaminated land officers covering the land within the draft Order Limits.

BASELINE CONDITIONS AND MAIN ISSUES

Baseline environment

14.27 A draft Phase 1 Geo-environmental assessment report has been prepared for the DCO Site, to identify the current baseline information. Preliminary Baseline Information is based on a site visit undertaken in May 2024, publicly available records including BGS records, the Coal Authority database, the Zetica Website, and MAGIC Map, as well as a Technical Note prepared for the DCO Site by Tier Consult Group (ref. TE1677-TE-00-XX-TN-GE-001-V01, dated 26th May 2023), which is compiled using data from a preliminary ground investigation completed by Ramboll (ref. PD-RAM-01-ZZ-REP-GE-0001, dated 23rd February 2018), and their own limited ground investigation. Relevant publicly available geo-environmental reports from planning applications for the DCO Site and immediate vicinity have also been reviewed. A Site-specific Groundsure report Site-specific Consultants Coal Mining Report have also been obtained. The comprehensive baseline for the DCO Site will be submitted as part of the Preliminary Environmental Information Report (PEIR) which will be subject to a period of consultation currently proposed for autumn 2025.

Current Site Activities

14.28 The DCO Site comprises: the Main Site which is the area east of the M6 and extends either side of the Parkside Link Road and includes the triangular parcel of land to the north of the Chat Moss Line; the Western Rail Chord, comprising the area west of the M6. The Main Site currently comprises agricultural land with sporadic farms/residences. The Kenyon Hall Farm Strip is located in the north of the Main Site. The Western Rail Chord area comprises overgrown vegetation, an active farm, and forms part of the former Parkside Colliery. The DCO Site is predominantly surrounded by agricultural fields.

Site History

14.29 The DCO Site has remained largely undeveloped comprising open fields with several farms/residences and ponds noted throughout its mapped history. A rail line (the Chat Moss Line) runs east/west in the far north of the DCO Site and beyond. Several ponds are recorded on historical mapping on the DCO Site, but are not marked on more recent mapping. The ponds may have been infilled, and the depth and nature of any infill will be investigated as part of the ground investigation.

14.30 The DCO Site surroundings were similarly used as predominantly agricultural land throughout the mapped history. Several industrial processes and sandstone quarrying activities are noted throughout the surrounding areas mapped history. Southworth Quarry is present to the south east of the DCO Site and the former Parkside Colliery encroaches slightly into the western draft Order Limits boundary at the Western Rail Chord.

Geology, Hydrology and Hydrogeology

- 14.31 The central section of the DCO Site is predominantly underlain by Devensian Till deposits or is devoid of any superficial deposits. Mapping indicates that Glaciofluvial Ice Contact deposits are located in the far north, with small sequences of Glaciofluvial Ice Contact deposits and Lacustrine Deposits in the northeast. Peat deposits are mapped within Highfield Moss (immediately to the north) and have the potential to extend onto the DCO Site and will be confirmed by ground investigation. Most superficial deposits overlie the Chester Formation (sandstone) bedrock. The Kinnerton Sandstone Formation, and the Manchester Marls Formation are located beneath superficial deposits in the west of the DCO Site.
- 14.32 The Western Rail Chord is similarly mapped as a mixture of superficial Devensian Till, with some areas being devoid of superficial deposits. Most of this section is underlain by the Chester Formation bedrock, with the eastern boundary indicated to be underlain by the Manchester Marls Formation.
- 14.33 Significant Made Ground is not indicated to be present on the DCO Site but may be present in the vicinity of roads, farms, historical potentially infilled ponds/pits, the M6 motorway, and the Chat Moss Line railway cutting and West Coast Mainline.
- 14.34 The EA classifies the Devensian Till as an Undifferentiated Secondary Aquifer, and the Glaciofluvial Ice Contact deposits and Glaciofluvial deposits as Secondary A Aquifers. The Chester Formation is classed as a Principal Aquifer, with The Manchester Marls Formation being classed as a Secondary A Aquifer and the Kinnerton Sandstone Formation being classed as a Secondary B Aquifer.
- 14.35 Three recorded pollution incidents relating to contaminated waters have occurred between November 2001 and July 2003 within approximately 150m and 210m of the DCO Site boundary. All had a minor impact on water.
- 14.36 The DCO Site is indicated to be predominantly within an EA GSPZ 3 (total catchment), with a small portion of the Western Section being briefly within a GSPZ 2 (outer catchment).
- 14.37 Several watercourses are located on the DCO Site. An unnamed inland river is located in the northeast of the DCO Site bordering Highfield Moss. This feature was noted to be largely dry with localised standing water during the site visit in May 2024. A further unnamed watercourse is indicated to flow northward (based on the DCO Site topography) from the railway (Chat Moss Line) within the northern edge of the DCO Site. Cockshot Brook is located off the DCO Site approximately 500m to the southeast and flows in a southerly direction. There is a small tributary to it which is in a shallow valley with the source indicated approximately 50m south east of the DCO Site.
- 14.38 The Spittle Brook Water Framework Directive (WFD) Surface Water body and Surface Water Body Catchment is located on the DCO Site. The Millingford (Newton) Brook is located approximately 50m west of the draft Order Limits boundary. Both have a moderate overall and ecological rating, with a failed chemical rating.

Ground Gasses and Radon

- 14.39 Most of the DCO Site is indicated to be in an area where less than 1% of properties are above the Radon Action Level, although a small area near the middle of the central DCO Site area has a radon risk of between 1-3%. In both cases, no radon gas protection is required.
- 14.40 Lacustrine deposits and Peat are superficial deposits that could contain organic materials, acting as a source of hazardous ground gas if the organic content is high. Localised Made Ground associated with the potentially infilled ponds/pits, in close proximity to farms, the M6 motorway and the railway cutting could also provide a source of hazardous ground gas.
- 14.41 The Quarry to the south east of the DCO Site was a former waste site (Gaskell Bros (Wm. & C.) Limited), accepting inert and non-biodegradable wastes, the main extents of which are outside of the draft Order Limits.

Environmentally Sensitive Sites

- 14.42 Highfield Moss is a SSSI immediately north of the DCO Site.

Coal & Other Mining Activities

- 14.43 The DCO Site is in a Coal Authority reporting area but not a Development High Risk Area. There are many records of past underground mining within the Coal Mining Report. The shallowest of these is at 361m below ground level (bgl) and at this depth is unlikely to present a significant surface instability risk. One mine shaft is indicated near the DCO Site relating to the former Parkside Colliery (reference 359394-001). This shaft has been filled and capped by British Coal in 1994, with a reinforced concrete 15m square and 1m thick cap.

Minerals Safeguarding

- 14.44 The Western Rail Chord is within an area allocated for SRFI development within the St Helens Local Plan and is not within a mineral safeguarded area as defined in the St Helens Local Plan.
- 14.45 The eastern area of the Main Site east of the Parkside East area is defined as a Mineral Safeguarding area for sand and gravel in the Wigan Local Plan.
- 14.46 An area in the south of the DCO Site is allocated as a Mineral Safeguarding area in the Warrington Local Plan although it is within the St Helens Borough boundary and includes a 500m buffer around the existing Southworth Quarry allocation.
- 14.47 The DCO Site sits within an Oil and Gas licencing area for which a number of Petroleum Exploration and Development Licences have been issued. The licences do not give permission for operations but grant exclusivity to licensees within the defined area.

Unexploded Ordnance

- 14.48 The DCO Site is in an area of low unexploded ordnance (UXO) risk.

Proposed approach to surveys and further baseline data collection

14.49 Where desk-based surveys or existing ground investigation information indicates that potentially significant effects may be present, these will be further assessed through intrusive ground investigation with groundwater, surface water, and/or gas monitoring as appropriate, prior to the DCO application. At this point, the proposed ground investigation is expected to comprise:

- A series of shallow (drilled into superficial and weathered bedrock strata) and deep (drilled into competent bedrock) boreholes across the DCO Site.
- Trail pits distributed across the DCO Site, to include investigation of the historical pond areas.
- Soakaway testing at depths and locations strategically targeted and informed by the drainage engineer to inform infiltration rates.
- Conversion of boreholes to combined ground gas and groundwater monitoring wells.
- Four weekly to fortnightly return visits to record groundwater levels and ground gas concentrations to inform hydraulic conditions in shallow and deep strata and facilitate a ground gas assessment.
- Soil chemical laboratory analysis on samples obtained from across the DCO Site at a UKAS and MCERTs accredited laboratory for a wide range of common contaminants and for Contaminants of Potential Concern identified during the desk study.
- Groundwater chemical laboratory analysis on samples obtained from across the DCO Site at a UKAS and MCERTs accredited laboratory for a wide range of common contaminants and for Contaminants of Potential Concern identified during the desk study.
- Geotechnical laboratory analysis on samples obtained from the DCO Site at a UKAS accredited laboratory to assess preliminary geotechnical solutions.

14.50 The ground investigation work would be designed and carried out in general accordance with BS 5930:2015 'Code of Practice for Site Investigations' and BS 10175:2011+A2:2017 'Investigation of potentially contaminated sites - Code of practice'. Phase 2 Geo-Environmental Assessment will be undertaken in accordance with BS 10175:2011+A2:2017 and EA Guidance on Risk Management of Land Contamination.

APPROACH AND METHODOLOGY

Determining the Significance of Effects

14.51 The approach described below forms the basis of the methodology used in the assessment of contamination. For contamination to present a significant potential effect a link must first be established within the CSM. The likelihood must be demonstrated with an identifiable source

(on site or off site), a receptor and a viable pathway. Potential contamination sources, have been identified from an assessment of:

- Current DCO Site uses and activities;
- Review of historical mapping for former uses;
- Review of regulatory permits, consents and authorisations contained within the Groundsure report for the DCO Site reproduced, such as landfills, environmental permits, pollution controls;
- Review of mining and ground instability risk ratings from BGS and Coal Authority records;
- Site visit to assess evidence of contamination; and
- Chemical laboratory analysis of soils samples recovered from the DCO Site.

14.52 Pathways will be specific to the receptor type. For example, they could include *inter alia*:

- Ingestion, inhalation, dermal contact for human health receptors;
- Infiltration and contaminant migration through permeable strata such as the unsaturated zone for groundwater;
- A secondary pathway from groundwater contamination to surface water;
- Migration of ground gases and vapours such as permanent gases, landfill gas and volatile hydrocarbons into buildings; and
- Direct contact and uptake by plants.

14.53 As well as the effects of contamination, other ground related issues considered include, ground instability issues or other ground related development constraints (e.g. worked ground, mining), UXO and loss of mineral resource.

14.54 For potential loss of minerals resource and other ground and ground stability related effects, the identification of receptors is based on relevant guidance and the professional judgement of a qualified technical specialist who has undertaken a desk study for the DCO Site, has visited the DCO Site and its surroundings, and reviewed ground investigation data and published records and mapping (e.g. BGS maps). In some cases, even without quantified information, it is reasonable to assume that some potential receptors will not experience significant effects. This is sometimes the result of tried and trusted mitigation measures that have been incorporated into the scheme, which might reasonably be expected to be effective.

14.55 The sensitivity of potential receptors can be described qualitatively according to the categories shown in Table 14.1.

Table 14.1 Criteria for assessing Receptor Sensitivity

Receptor sensitivity/ Value of Resource	Explanation	Receptor / Resource
Very high	The receptor has no to low ability to absorb change without fundamentally altering its present character, is of high environmental value, or is of national or international importance.	<p>Human health of vulnerable users of residential areas, schools and playing fields.</p> <p>Surface water bodies of high quality e.g. main rivers and primary tributaries with good biological and/or chemical quality and/or Principal Aquifers used for public water supply.</p> <p>Nationally designated areas e.g. Ramsar sites, SSSI's or Ancient woodland.</p>
High	The receptor has low ability to absorb change without fundamentally altering its present character, is of high environmental value, or is of national importance.	<p>Human health of users of residential areas, schools and playing fields.</p> <p>Surface water bodies of high quality e.g. main rivers and primary tributaries with good biological and/or chemical quality and/or Principal Aquifers.</p> <p>Major strategic mineral resource areas, e.g. areas associated with a particularly high grade or quality resource or rare minerals.</p>
Moderate	The receptor has moderate capacity to absorb change without significantly altering its present character, has some environmental value, or is of regional importance.	<p>Human health of users of retail and business parks (public and work places)</p> <p>Ground instability associated with occupied or part-time occupied commercial structures.</p> <p>Surface water bodies of moderate quality, and/or Secondary A Aquifers.</p> <p>Regionally or locally important mineral resource areas (Mineral Planning Area (MPA) or Mineral Safeguarding Area (MSA)).</p> <p>Underground structures.</p>

Receptor sensitivity/ Value of Resource	Explanation	Receptor / Resource
Low	The receptor is tolerant of change without detriment to its character, is low environmental value, or local importance.	Human health of users of Commercial or industrial development. Ground and construction workers Ground instability associated with non-occupied buildings and infrastructure Mineral Areas of Search/ Consultation Areas (MCA). Secondary B and undifferentiated aquifers.
Very Low	Very little change from baseline conditions. Change barely distinguishable, approximating to a 'no change' situation.	Human health of users of Commercial or industrial development
Negligible	No change or indiscernible change from baseline conditions.	Unproductive Strata

14.56 The magnitude of land contamination effects is assessed by comparing all contaminant linkages at a baseline value (existing condition) to those during construction and operational circumstances. This provides a way of assessing adverse and beneficial effects through the Proposed Development lifecycle. The magnitude will be assessed using a six-point scale as shown in Table 14.2.

Table 14.2 Impact Magnitude Criteria

Effect Magnitude	Criteria
Very High	Results in total loss of attribute and/or likely to cause exceedances well above statutory objectives and/or major breach of legislation and/or

Effect Magnitude	Criteria
	present a major development constraint.
High	Results in effect on integrity of attribute/or loss of part of attribute, and/or possibly cause exceedance of statutory objectives and/or breach of legislation and/or would present a major development constraint.
Medium	Results in effect on integrity of attribute/or loss of part of attribute, and/or possibly cause exceedance of statutory objectives and/or breach of legislation and/or would present a moderate development constraint.
Low	Results in minor effects on attribute/receptor e.g. measurable effect but below a level that would breach legislative or statutory limits and/or would present a minor development constraint.
Very Low	Results are minimal on attribute/receptor e.g. barely measurable effect and/or well below a level that would breach legislative or statutory limits and/or would present a development constraint.
Negligible	Results in no change or effect on attribute

14.57 The assessment methodology for Effect Significance detailed in Chapter 4: Approach to the Assessment will be adopted to assess the risks associated with the Geology Soils and Contaminated Land across the DCO Site.

Geographical Scope

14.58 This geographical area included in this assessment is a 250m radius from the DCO Site boundary. This distance is considered a reasonable distance based on standard practice and professional judgment to which contamination sources can migrate and potentially cause impact to the DCO Site. There is no defined radius in the guidance or British Standard.

PRELIMINARY ASSESSMENT OF POTENTIAL EFFECTS

Receptors

14.59 The following receptors have been identified from the baseline information that will need to be considered in the EIA:

Human Health:

- Future DCO Site users (commercial).
- Neighbouring public (residential/commercial).
- Construction workers.
- Intrusive maintenance workers.

Controlled Waters:

- Groundwater (Principal Aquifer, Secondary A, B and Undifferentiated Aquifers, active groundwater abstraction point, Groundwater Source Protection Zones, WFD Groundwater Body).
- Surface water (Unnamed inland river) including proposed water courses.

Ecology:

- Flora and Fauna on the DCO Site and along water courses.
- Highfield Moss SSSI located immediately north of the DCO Site.

Property:

- Underground utilities
- Building structures
- Chat Moss Line Railway Embankment

Geology:

- Soil and rock resource

Pathways

14.60 The pathways identified that could lead to an effect on the identified receptors are:

Human Health:

- Dermal contact with soil or dust
- Incidental ingestion of soil and/or dust
- Inhalation of dust and/or fibres
- Inhalation of vapours

- Migration and accumulation of ground gas in enclosed spaces leading to inhalation or explosion

Controlled Waters:

- Leaching of soil contaminants
- Vertical and lateral migration
- Surface run-off

Ecology

- Lateral migration
- Uptake and accumulation

Property:

- Direct Contact
- Accumulation and explosion of gas

Geology:

- Physical effects during construction
- Sterilisation of mineral resources within Mineral Safeguarded areas in accordance with Wigan and Warrington local policy maps.

14.61 UXO has been identified as a low risk based on Zetica data and has therefore been scoped out of the assessment.

PROPOSED AVOIDANCE AND MITIGATION MEASURES

14.62 In line with standard good practice a Construction Environmental Management Plan (CEMP), would provide the framework for managing environmental impacts during the construction phase of the Proposed Development, including the control of impacts arising from groundwork related activities including the safe management of any contaminated soils that may be encountered across the DCO Site and minimising/mitigating against any negative impacts that may arise during earthworks or construction activities.

14.63 The cut/fill earthworks strategy will aim to achieve a balance at the DCO Site. If this cannot be achieved, the timescales for the Proposed Development allow receiver sites to be found as the construction progresses to avoid disposal of material to landfill, if there is surplus material. Re-use of soil materials would be facilitated under a Material Management Plan (MMP) under the CL:AIRE Definition of Waste Code of Practice (DoWCoP) prepared prior to development commencing. The CL:AIRE Definition of Waste: Code of Practice is used to demonstrate that excavated soils that are re-used meet the criteria for:

- Protection of human health and protection of the environment;
- Suitable for use without further treatment;
- Quantity of use; and
- Certainty of use.

14.64 Fill materials will be placed to an end-product specification to avoid differential settlement issues and additional reinforcement is likely to provide support where any structures span over cut and fill areas. Additionally, cut and fill slopes will be suitably designed to achieve global stability and ensure health and safety of any workers, and the public is ensured.

14.65 Works at, or near to, existing rail and road structures will be subject to detailed geotechnical design and assessment approval in accordance with Highways England Design Manual for Roads and Bridges CD 622 in the case of the National Highways and to Network Rail Standards. Slopes will require detailed assessment and appropriate design, retaining and temporary shoring.

14.66 Additional mitigation measures to prevent, reduce and/or offset likely effects which would not be avoided through the above design include:

- Changes to the parameters plan, or earthworks strategy to minimise impact on Highfield Moss SSSI resulting from changes to the hydrogeological regime.
- Remediation of soils and/or groundwater or implementation of mitigation, such as clean soil cover through the submission and approval of a Remediation Strategy/Remediation Design Statement.
- Use of MMP to manage reuse of potentially contaminated soils.
- Installation of gas protection measures in proposed buildings.

UNCERTAINTIES

14.67 The surveys proposed will seek to identify potentially significant sources of contamination at the DCO Site. It may not be possible to fully identify or eliminate all contamination sources of the DCO Site where these are localised and there is no evidence to indicate its existence. By preparing an MMP and Remediation Strategy/Remediation Design Statement as part of detailed design and secured by requirement in the DCO, any previously unforeseen contamination identified during the construction phase can be managed using a hotspot protocol.

SUMMARY OF PROPOSED EIA SCOPE

14.68 Table 14.3. below summarises the potential impacts that are to be scoped in and out of the EIA.

Table 14.3 Summary of Geology, Soils and Contaminated Land impacts proposed to be scoped in and out of the EIA

Impacts	Scoped in or out?	Justification
Construction		
Impacts on receptors from Contamination and Ground Gas arising from the DCO Site and nearby	In	While the desk-based information and site visit have not identified many significant sources of contamination, localised sources may exist associated with historical activities. Ground Investigation and Phase 2 assessment will be undertaken to assess this and identify mitigation requirements.
Impacts on or loss of Soils and Geology as a resource	Out	Impacts will be managed through embedded mitigation in production of a CEMP and MMP.
Impacts on receptors from construction related activities	Out	This would be embedded mitigation in the CEMP.
Encountering UXO	Out	The DCO Site is in a low UXO risk area.
Operation		
Loss of minerals resource	In	Parts of the Main Site are located in an allocated minerals resource area in the Wigan and Warrington Local Plans.
Hydrogeological changes impacting upon Highfield Moss SSSI	In	It is unclear whether the SSSI could be impacted by changes to the hydrogeological regime that the development could create. This will therefore need to be assessed. The actual impacts on ecology will be assessed in the Ecology and Hydrology Chapters of the ES.
Mining related	Out	Desk-based information including a Coal Authority Mining Report confirms that the DCO

Impacts	Scoped in or out?	Justification
impacts		Site is not in a Development High Risk Area as designated by the Coal Authority.

Chapter 15 ◆ Materials and Waste

INTRODUCTION

- 15.1 This chapter describes the scope and methodology that will be used to assess the likely significant environmental effects associated with the management of solid waste arising during the demolition, construction and operation of the Proposed Development. Waste is defined in Article 1(a) of the Revised Waste Framework Directive 2008/98/EC as *“any substance or object in the categories set out in Annex I which the holder discards or intends to discard or is required to discard”*. Waste can be further classified as hazardous, non-hazardous or inert.
- 15.2 The consideration of material resources will comprise maximising the beneficial reuse of materials arising from the demolition of existing buildings and construction of the Proposed Development (e.g. excavated material). Only if excavated material is considered surplus to requirements for the Proposed Development and/or specified ‘receiver sites’ as defined by CL:AIRE¹ have not registered interest or are available, will it become ‘waste’. The mineral resources located within the DCO Site will be considered as part of the assessment of Ground Conditions. In lieu of defined and detailed information with respect to end-user requirements, assumptions have been applied based on professional judgement.
- 15.3 In line with the EIA Regulations, this Scoping Report chapter has been compiled by appropriately qualified, experienced, and competent experts. This chapter has been completed by BWB Consulting Ltd who are experienced in delivering waste management consultancy services for projects similar to the Proposed Development. The author of this chapter is Matt Wilby MSc (hons), CEnv, MIEMA, an Environmental Consultant with over 15 years of industry experience in the UK and internationally. This chapter has been reviewed and approved by Iqbal Rassool MCIWEM C.WEM CEng (over 25 years of relevant UK experience).

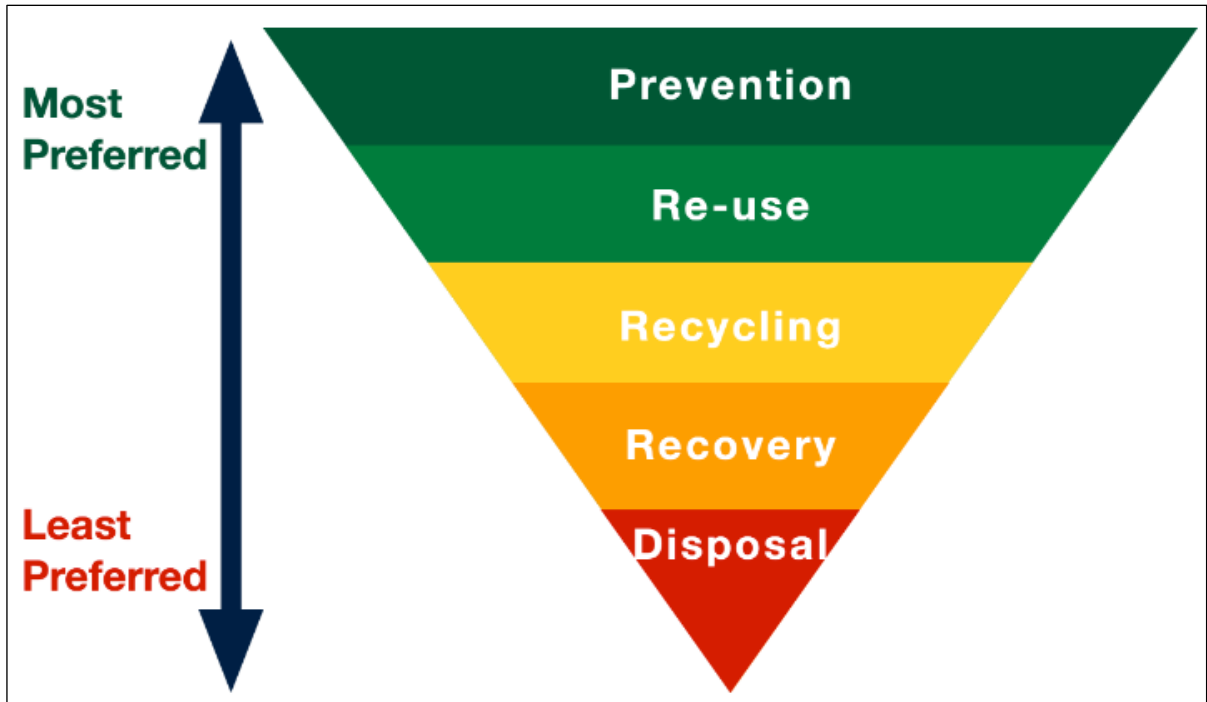
RELEVANT LAW, POLICY AND GUIDANCE

- 15.4 The principal objective of sustainable waste and material resource management is to use material resources more efficiently, thereby preventing and reducing the amount of waste generated as well as minimising the quantity of waste that requires final disposal to landfill. It is proposed that waste and materials will be dealt with in line with the Government’s waste hierarchy (as shown in Figure 15.1), which is a statutory requirement to sustainable waste and material resource management under regulation 15(1) of the Waste (England and Wales)

¹ CL:AIRE is keeping a register of sites that require or can accommodate surplus inert materials. The Proposed Development would seek to register as a donor before identifying a suitable destination using the appropriate registry.

Regulations 2011².

Figure 15.1 Waste Hierarchy



- 15.5 The latest waste legislation, policy and guidance will be summarised and used to inform the appropriate and proportionate consideration of waste within the Environmental Statement (ES).
- 15.6 For many years, EU waste legislation has been central in shifting UK policy from landfill disposal to increased recycling and tighter environmental protections. The vast majority of these principles remain enshrined in UK law following the UK departure from the EU.

The Environmental Permitting (England and Wales) Regulations (2016)³

- 15.7 The Environmental Permitting Regulations aim to ensure that waste activities are authorised and that their discharges do not harm human health or the environment. For the Proposed Development, environmental permits must be granted by the EA. The Regulations combine the requirements for an integrated waste management approach and for hazardous waste management. This provides a framework for regulation that enables the EA to assess permitting and compliance.

² UK Government (2011) 'The Waste (England and Wales) Regulations 2011'

³ The Environmental Permitting (England and Wales) Regulations 2016. 675. London: The Stationery Office. Available from: <https://www.legislation.gov.uk/ukdsi/2010/9780111491423/contents>

The Hazardous Waste (England and Wales) Regulations (2005) ⁴

- 15.8 The Hazardous Waste Regulations set out the regime for the control and tracking of hazardous waste in England and Wales. The regulations introduced a process of registration of hazardous waste producers and a new system for recording the movement of waste.

Environment Act (2021) –Part 3 (Waste and Resource Efficiency) ⁵

- 15.9 New provisions for the management of waste and producer responsibility are outlined as one of four key priority areas in Part 3 of the Environment Act 2021 (Waste and Resource Efficiency). The Act also covers the management of ‘recyclable relevant waste’ (glass, metal, plastic, paper and card, and food waste) from household, industry and commercial activities.

National Policy Statement for National Networks (2024)⁶

- 15.10 The National Policy Statement for National Networks (NPSNN) outlines the government’s policies regarding the development and operation of national infrastructure networks, particularly for transport, including roads, railways and rail freight. Waste management is a crucial aspect of this policy, reflecting the need for sustainable development and environmental protection in infrastructure projects. Paragraph 5.71 states that waste should be managed in accordance with the Waste Hierarchy and consideration should be given to circular economy principles wherever practicable.

Waste Management Principles:

- 15.11 The NPSNN emphasises the importance of minimising waste and promoting sustainable waste management practices during the construction and operation of national networks. It highlights the need for developers to adopt waste hierarchy principles, prioritising waste prevention, reuse, and recycling over disposal (Paragraph 4.31).

Environmental Impact Assessments (EIA):

- 15.12 Developers are required to conduct thorough Environmental Impact Assessments for projects, which must include assessments of potential waste generation and management strategies. This is to ensure that waste is managed responsibly and sustainably throughout the project lifecycle (Paragraph 4.32).

Construction and Demolition Waste:

- 15.13 The NPSNN recognises the significant amounts of waste generated during construction and demolition activities. It calls for the implementation of waste management plans that outline how materials will be managed, aiming to reduce construction waste and promote recycling

⁴ The Hazardous Waste (England and Wales) Regulations 2005. 894. London: The Stationery Office. Available from: <https://www.legislation.gov.uk/ukxi/2005/894/made>

⁵ UK Government (2020) ‘Environment Act 2021’

⁶ National Policy Statement for National Networks, Department for Transport (2024) Available from <https://assets.publishing.service.gov.uk/media/65e9c5ac62ff48001a87b373/national-networks-national-policy-statement-web.pdf>

of materials (Paragraph 4.33).

Collaboration with Local Authorities

- 15.14 The policy encourages collaboration between developers and local authorities to align waste management practices with local waste strategies. This ensures that infrastructure projects contribute positively to local waste management goals and do not overwhelm existing systems (Paragraph 4.34).

Sustainable Transport Solutions

- 15.15 The NPSNN promotes sustainable transport solutions that minimize environmental impacts, including waste generation. It encourages the use of materials that have lower environmental footprints and supports innovations that can lead to reduced waste in transport operations (Paragraph 4.35).

National Planning Policy Framework (2023)⁷

- 15.16 The National Planning Policy Framework (NPPF), most recently updated in December 2023, sets out the Government’s planning policies for England. The NPPF must be taken into account in preparing development plans and is a material consideration in planning decisions. The policy sets out objectives for sustainable development which includes protecting and enhancing our natural, built and historic environment through minimising waste and pollution.
- 15.17 A draft consultation NPPF was produced in July 2024 in advance of an updated NPPF. However, none of the currently proposed changes are relevant to the management of waste.

Our Waste, Our Resources: A Strategy for England (2018)⁸

- 15.18 The Our Waste, Our Resources Strategy, building on the previous national waste strategies for 2000 and 2007, contains actions and commitments, which set a clear direction towards a zero-waste economy.
- 15.19 The Government Review of Waste Policy in England 2011⁹ sets out the long-term strategy for the prevention and management of waste, following the waste hierarchy approach set out in the EU Waste Framework Directive¹⁰.
- 15.20 There is as such, a well-established but evolving legal and regulatory framework for the management and disposal of waste which sits within UK legislation and policy at national, regional and local level. Where possible, applicants are encouraged to use existing materials

⁷ Ministry of Housing, Communities & Local Government (2021) National Planning Policy Framework. London. Available from: https://assets.publishing.service.gov.uk/media/669a25e9a3c2a28abb50d2b4/NPPF_December_2023.pdf

⁸ HM Government (2018) *Our Waste, Our Resources: a Strategy for England*. London. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/765914/resources-waste-strategy-dec-2018.pdf

⁹ UK Government (2011) ‘Government review of waste policy in England 2011’

¹⁰ EU (2008) ‘Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives’

first, then low carbon materials, sustainable sources, and local suppliers. Consideration should be given to circular economy principles wherever practicable, for example by using longer lasting materials efficiently, optimising the use of secondary materials and how the development will be maintained and decommissioned. Applicants should consider and take into account emerging government policy, including ‘*maximising Resources, minimising waste*’, constituting the new ‘Waste Prevention Programme for England’¹¹ and Defra’s ‘Construction Code of Practice for the Sustainable Use of Soils on Construction Sites’¹², which provides practical guidance on how to improve appropriate soil reuse on construction sites and reducing the volume that is sent to landfill.

Regional Policy

- 15.21 The Liverpool City Region (‘LCR’) (a campaign initiative of Merseyside Recycling and Waste Authority (MRWA)) is working towards the ambitious goal of becoming a Zero Waste City by 2040. This framework emphasises reducing waste, improving recycling, and moving towards a circular economy, which minimises the use of raw materials. It aligns with the National Resources and Waste Strategy, aiming to decarbonise material resource management. Strategies include promoting community composting, reducing food waste (which makes up a significant portion of waste), and encouraging reuse¹³. The policy emphasis the waste hierarchy, prioritising waste prevention, followed by reuse, recycling, and recovery - disposal is the last resort, aligning with national goals. It further seeks to promote a circular economy, encouraging the reduction of material waste and maximising resource recovery; this involves decarbonising material resource use and minimising landfill use.
- 15.22 The Joint Waste Local Plan for Merseyside and Halton (JMWP)¹⁴ was formally adopted by the six councils of Halton, Knowsley, Liverpool, Sefton, St Helens and Wirral in July 2013. It is a strategic framework that guides waste management in the Merseyside and Halton areas. It aims to promote sustainable waste management practices, reduce landfill reliance, and enhance recycling and recovery efforts.
- 15.23 The ‘Greater Manchester Joint Waste Plan’¹⁵, adopted by the Greater Manchester Combined Authority, guides the region's waste management approach until 2039. It promotes reducing waste, improving recycling, and enhancing waste treatment facilities. The plan prioritises resource efficiency, aligning with broader environmental goals to reduce carbon emissions. The region is also part of the ‘Places for Everyone Joint Development Plan’¹⁶, which incorporates sustainable waste management in planning.

¹¹ Department for Environment, Food and Rural Affairs (August 2024): ‘Waste Prevention Programme for England: Maximising Resources, Minimising Waste’

¹² Department for Environment, Food and Rural Affairs (September 2011): ‘Construction Code of Practice for the Sustainable Use of Soils on Construction Sites’

¹³ Merseyside Recycling and Waste Authority (2023): ‘Zero Waste 2040 Strategic Framework’

¹⁴ Halton, Knowsley, Liverpool, St. Helens, Sefton and Wirral Councils (2013): Joint Merseyside and Halton Waste Local Plan

¹⁵ Association of Greater Manchester Authorities (2021): ‘Greater Manchester Joint Waste Development Plan Document’

¹⁶ Greater Manchester Combined Authority (March 2024): ‘Places For Everyone Joint Development Plan Document’

Local Policy

15.24 St Helens Borough (part of Liverpool City Region), waste management aligns with the Liverpool City Region's Zero Waste Strategy. The region's waste policies influence local planning efforts, focusing on reducing landfill reliance, enhancing recycling, and promoting sustainable waste practices. Local authorities work collaboratively under the Merseyside Recycling and Waste Authority, ensuring alignment with broader regional waste strategies.

St Helens Borough Local Plan

15.25 Policy LPC15: Waste of the St Helens Borough Local Plan¹⁷ states that the Council will promote sustainable management of waste in accordance with the waste hierarchy, national planning policy and the Merseyside and Halton Joint Waste Local Plan 2013. Key objectives the Council will work to that are relevant to the Proposed Development are:

- *“assist in the implementation of a resource-recovery led strategy for sustainable waste management;*
- *encourage good design in new development in order to minimise waste, promote the use of reclaimed and recycled materials and to facilitate the storage, collection and recycling of waste; and*
- *encourage the sustainable transport of waste and promote the use of mechanisms such as waste audits and waste management plans to minimise the generation of waste”.*

15.26 Policy LPD01: Ensuring Quality Development of the Local Plan states that all proposals for development must “ensure that development involving demolition and / or construction works minimises the generation of waste and promotes the use of recycled and / or locally sourced building materials in accordance with policy WM8 of the Merseyside and Halton Joint Waste Local Plan 2013”.

Wigan Council

15.27 Policy CP 14 ‘Waste’ of the Wigan Local Plan 2013¹⁸ no longer form part of the Development Plan for Wigan Borough according to the Wigan Local Plan Core Strategy Remaining policies document¹⁹ produced by the Council in 2024. Waste management policy for the Council is set out in the Places For Everyone Joint Development Plan Document produced by the GMCA.

Warrington Borough Council Local Plan

15.28 Policy ENV1 - Waste Management of the Warrington Borough Council Local Plan²⁰ sets out the Council’s approach to waste management and gives guidance on how development should respond to waste issues across the Borough. This policy states that *“The Council will promote sustainable waste management in accordance with the Waste Hierarchy. In working*

¹⁷ St Helens Borough Council (2022): ‘St Helens Borough Local Plan up to 2037’

¹⁸ Wigan Council (2013): ‘Wigan Local Plan Core Strategy’

¹⁹ Wigan Council (2024): ‘Wigan Local Plan Core Strategy Remaining policies’

²⁰ Warrington Borough Council (2023): ‘Warrington Local Plan 2021/22 - 2038/39’

towards the prevention of waste, Warrington will seek to achieve a reduction in the amount of waste produced in the Borough and treat waste at as high a level of the waste hierarchy as practicable by; requiring waste reduction in all aspects of planning/development, including the construction, design (using recycled materials) and operation stages; and providing appropriate and sustainable sites and/or areas for the management of waste”.

Summary

- 15.29 The key objectives of the waste and materials resource proposals for the Proposed Development will be to provide assurance that the Proposed Development will:
- make efficient use of resources;
 - make use of materials that mitigate the environmental impact of the Proposed Development;
 - produce as little waste as possible, and re- use it as a resource where possible (as per paragraph 5.39 of the NPSNN); and
 - be subject, as appropriate, to the Environment Agency’s (EA) Environmental Permitting regime for appropriate waste management as set out in paragraphs 4.48 to 4.56 of the NPSNN.

CONSULTATION TO DATE

- 15.30 To supplement the desk-based research, targeted consultations have been initiated with key stakeholders involved in waste management in the region. These consultations will ensure the accuracy and completeness of the baseline data and provide valuable local insights. Engagement with regional and local authorities, including LCR, GMCA, SHBC and WC, will provide up-to-date information on local and regional waste arisings, current waste disposal practices, and future planning developments that may affect waste management infrastructure. Further discussions with the LCR, GMCA, SHBC and WC will be essential to understand how current and future waste policies will influence the Proposed Development and to identify any potential challenges or opportunities for waste mitigation strategies.
- 15.31 In addition to local government bodies, consultation will also be undertaken with the Environment Agency to gather critical information on waste regulations and data on hazardous waste, waste permits, and the environmental impact of existing waste streams in the area. Engagement with landowners and site occupiers will provide additional insight into current on-site waste management practices, particularly for agricultural or industrial activities, while discussions with waste operators will help to confirm the availability of waste management infrastructure, such as treatment and recovery facilities, which will play a key role during the construction and operational phases of the Proposed Development. This collaborative approach will ensure a well-rounded understanding of the waste context for the Proposed Development. Consultation has begun with LCR, Greater Manchester Waste Authority A, Merseyside Environmental Advisory Service (MEAS), , WC and the Environment Agency to identify and confirm the following:

- local and regional waste arisings;
- availability of local and regional waste infrastructure;
- planning, development management and waste management policies to be considered during the assessment process, and particularly with respect to defining any mitigation measures required; and
- potential innovation and mitigation to reduce or reuse material and waste arising from the Proposed Development.

15.32 Additional consultation and information will be sought from landowners, occupiers, commercial premises and the Environment Agency regarding agricultural waste arisings. This will help ensure a comprehensive understanding of waste generation and management practices specific to agricultural activities associated with the DCO Site.

BASELINE CONDITIONS AND MAIN ISSUES

Baseline environment

- 15.33 Notably, the DCO Site comprises agricultural land, residential dwellings / farmsteads and supporting infrastructure including but not limited to Kenyon Hall Farm Airstrip, commercial premises (including the 'Procon' ready-mix concrete supplier), ponds and drainage ditches, hedgerow and field margins, small areas of woodland, a temporary construction compound (associated with the construction of the PLR) and associated highways. The DCO Site is a source of agricultural and green waste and small quantities of commercial and municipal (or 'household') waste arising from current occupiers. The exact quantities of waste generated at the DCO Site are currently unknown.
- 15.34 Household waste in the DCO Site is primarily the responsibility of, and collected by, St Helens Borough Council ('SHBC') ensuring regular waste disposal services for residents, including the collection of general waste, recyclables, and garden waste. Other properties within the draft Order Limits fall under the jurisdiction of Wigan Council, which operates with the same responsibilities and obligations. Recycling is strongly encouraged in both SHBC and WC, and there are various facilities available to dispose of general waste and recyclables. Waste that cannot be recycled is typically diverted to energy-from-waste plants, ensuring that no waste goes to landfill - this is part of SHBC's commitment to 100% landfill diversion (it is noted whilst a significant portion of WC's waste is sent to energy-from-waste facilities, landfill is still necessary in some instances). Both SHBC and WC provide trade waste collection and disposal services for dry waste to businesses throughout their respective borough boundaries. The destination for composting, landfill, recyclables, material recovery facilities and any treatment plant are to be determined, but it is recognised that SHBC offers a tailored business waste collection service that ensures 100% landfill diversion, with the waste also being sent to energy recovery facilities.
- 15.35 In the UK, farm waste is managed according to strict regulations designed to protect the environment, human health, and animal welfare. The management of farm waste is guided by various laws, including the Waste Management (England and Wales) Regulations 2006, the

Environmental Permitting (England and Wales) Regulations 2016, and other agricultural regulations; the Environment Agency (EA) and local authorities enforce waste management regulations. Hazardous farm waste must be disposed of by licensed waste carriers who are authorised to handle and treat hazardous materials. Farmers must store hazardous waste securely to prevent leaks or contamination. They must also keep detailed records of hazardous waste disposal to ensure compliance with regulations. Farmers are allowed to burn certain types of waste, such as untreated wood or plant material, under controlled conditions. However, there are restrictions on burning plastics, hazardous materials, or treated wood due to the potential for air pollution. It is expected (though not yet quantified), given general agricultural practices, that hazardous waste (such as pesticides, herbicides, chemicals, slurry and veterinary medicines) are stored on site.

- 15.36 Further to desk-based analysis used to inform this Scoping Report, in-situ surveys will be undertaken in coordination with the current occupiers to quantify and assess the potential for hazardous substances to be present on site during construction (outlined below).

Proposed approach to surveys and further baseline data collection

Desk-based Review

- 15.37 A desk-based review has been conducted to gather existing data and reports that are relevant to waste generation and management in the project area.
- 15.38 This review encompassed local, regional, and national waste data, including the identification of existing waste arisings, management practices, and the infrastructure available to support waste treatment and disposal. Information will be drawn from a variety of sources, including national databases (such as those maintained by the Environment Agency), local authority reports, and regional waste management strategies.
- 15.39 Key waste arisings data, such as volumes and types of waste generated in the region, will be analysed to create a detailed picture of the waste landscape. This review will also consider the availability and capacity of waste treatment, recycling, and landfill facilities, paying close attention to any projected capacity constraints that might be exacerbated by the Proposed Development. The review will additionally assess existing waste and materials-related policies at the local, regional, and national levels, including any relevant strategies from the LCR, GMCA, SHBC and WC, to ensure the waste management practices proposed align with regulatory expectations.

In-situ Survey

- 15.40 Following initial site walkovers, further site surveys will be conducted to inform the 'Preliminary Environmental Information Report' (PEIR). The surveys will quantify and categorise any existing stockpiles of materials such as soil, rubble, or demolition waste. In addition to this, the surveys will also help appraise the materiality of the proposed demolition and site clearance. In conjunction with best practice, specific actions undertaken will include:
- Conduct a visual inspection to identify and inspect buildings for demolition, existing waste storage areas, stockpiles, and site access routes.

- Assess compliance with the Environment Agency’s guidelines for waste storage, including minimum separation distances, stockpile heights, and drainage considerations.
- Develop a site map outlining current stockpile locations, boundaries, and any sensitive areas such as watercourses or residential zones.
- Utilise surveys to assess the landform and provide accurate spatial data on the location and volume of existing stockpiles;
- Classify materials according to the ‘European Waste Catalogue’ (EWC) codes and any specific requirements of the ‘Waste Acceptance Criteria’ (WAC); and
- Use UK guidance (BS 9335:2019) to quantify stockpile volumes and estimate volumes of demolition waste.

15.41 This evaluation will help both consultant and stakeholders understand the scope of the demolition and its potential environmental and logistical impacts, enabling the team to accurately fulfil the requirements of the assessment.

15.42 By identifying the types and quantities of materials on-site, the assessment will guide proper disposal methods, recycling opportunities, and adherence to regulatory standards for waste management. This process ensures that the demolition and clearance activities are conducted responsibly, minimising risks and optimising resource recovery. Beyond these surveys, the consultant will work alongside the respective experts for the Hydrology (Chapter 13) and Geology, Soils and Contaminated Land (Chapter 14) to identify inter-relationships and inform the waste and material assessment. However, this approach will be reviewed upon completion of the baseline analysis, and any further requirements will be considered if new data or conditions warrant additional investigation.

APPROACH AND METHODOLOGY

15.43 In the UK, there is no single, definitive guidance specifically dedicated to waste and material assessments in EIA. However, waste-related considerations within EIAs are governed by broader regulations, policies, and guidance documents. Both are often assessed in the context of overall environmental effects, including resource management, pollution control, and sustainability.

15.44 The proposed assessment methodology is based on best practice guidance (IEMA, 2020²¹), EIA practitioners’ professional judgement and experience with the application of EIA to rail-related large-scale commercial/industrial infrastructure projects. IEMA guidance notes:

“Organisations and major developments (particularly those subject to a DCO or Transport Works Act Order) may wish to generate and set their own criteria and thresholds for assessment, based on historical and industry-specific information they feel is appropriate to the particular conditions and requirements of developments under their control”.

²¹ IEMA, (2020) ‘Materials and Waste in Environmental Impact Assessment. Guidance for a proportionate approach’

- 15.45 While IEMA does not provide specific waste criteria, it suggests that significance should be determined based on the magnitude of waste generated, the sensitivity of the receiving environment (e.g., landfill capacity), and compliance with regulatory frameworks and waste management policies.
- 15.46 In the absence of specific national guidance, the Consultants will rely upon best practices established in previous EIAs and case law from similar projects to inform their judgement.

Spatial scope

- 15.47 Waste and material resources will be assessed on a DCO Site wide basis having regard to the local and regional jurisdiction in which the Proposed Development is located.
- 15.48 The study area for the assessment of waste will principally comprise the draft Order Limits. In addition, the relevant local waste infrastructure (waste management facilities up to 10km from the DCO Site) and regional mineral resource planning areas (where necessary) will be referred to within the assessment as the Expansive Study Area.
- 15.49 The combined waste arisings from multiple developments in the region, including the adjacent consented 'Parkside West' (Land Site of Former Parkside Colliery)²² development, could place strain on local waste management infrastructure, such as recycling facilities and landfills. As such, an operational waste management plan will be prepared to account for the Proposed Development contribution to the overall waste profile of the area.

Temporal scope

- 15.50 IEMA recommends a lifecycle approach when assessing waste impacts in EIAs, considering waste generation, transportation, treatment, and disposal, as well as opportunities for waste minimisation and recycling throughout all stages.
- 15.51 The detail of the temporal scope of the assessment will therefore coincide with the expected phasing of the Proposed Development, including both the construction and operation stages, once defined.

Construction effects

- 15.52 Most demolition waste, as per the Applicant's commitments, is expected to be re-used where feasible on-site. Should disposal be required off-site, the Applicant is committed to ensuring that disposal is dealt with in compliance with environmental regulations and industry best practices, particularly when hazardous materials or contaminants are involved. Additionally, sending waste off-site allows for proper recycling, reuse, or disposal in facilities equipped to manage large volumes, reducing the environmental impact and ensuring the Proposed Development meets sustainability goals.
- 15.53 Construction effects will address the permanent, indirect impacts of solid waste that will be generated by earthworks, demolition and construction activities and that may require off-site disposal during the proposed construction period. The scope of the assessment of

²² Planning reference: P/2018/0048/OUP

construction effects will also include waste generation and its off-site disposal for recycling and to landfill associated with construction activities. Quantification will be on the basis of survey information or using published waste generation rates.

- 15.54 Assumptions regarding the type and quantity of waste to be diverted from landfill via reuse, recycling and recovery will be applied. Following this, the type and quantity of demolition materials, excavated material, construction materials and site waste requiring landfill disposal will be assessed in relation to the projected quantity of landfill disposal capacity in the designated local and regional areas throughout the proposed construction period.

Operation effects

- 15.55 The assessment will identify the types and quantities of solid waste forecast to be generated during the first full year of operation of the Proposed Development (e.g. the ‘worst case’ scenario). This forecast will be based upon the maximum capacity (e.g. the ‘maximum parameters’) of the Proposed Development and any effects will be assumed to be annual. Quantification may be on the basis of existing operational waste management performance data or using published operational waste generation rates for the relevant land use activities. This approach ensures that potential impacts are fully evaluated, accounting for the highest possible demand and providing a comprehensive analysis under maximum operating conditions.
- 15.56 Assumptions regarding the type and quantity of waste to be diverted from landfill via reuse, recycling and recovery will be applied. Following this, the type and quantity of operational waste arising from track maintenance waste and ancillary infrastructure waste requiring landfill disposal will be assessed in relation to the projected quantity of landfill disposal capacity in the designated local and regional areas throughout the proposed construction period in the worst case. Recognising the need to promote a circular economy and divert waste from landfill, encouraging the reduction of material waste and maximising resource recovery, an assessment of regional infrastructure (including energy from waste) to support sustainable waste management will also be included.
- 15.57 Waste transferred off-site would be handled by a registered waste carrier authorised by the Environment Agency and taken to a permitted or exempt facility authorised to receive and handle that waste under Duty of Care arrangements (i.e. this assessment would not consider the likely significant environmental effects of any illegal waste management and disposal). It has been assumed that all construction and operational activities will be in accordance with the relevant environmental regulatory requirements.
- 15.58 Waste arising from the preparation, site removal and construction processes will require management. The Proposed Development will result in construction and demolition waste being produced. A Site Waste Management and Materials Plan (SWMMP) will be prepared in conjunction with a Construction Environmental Management Plan (CEMP). This, alongside other construction phase waste management measures, will help to ensure that construction waste is minimised, re-used and recycled wherever possible and will ensure that there are no significant effects on the capacity of the local waste management infrastructure as a result of the Proposed Development.

Determining the Significance of an Effect

- 15.59 There is no single, definitive guidance specifically for defining the significance criteria for waste in EIA. However, there are several key regulations, industry standards, and guidelines that influence how waste impacts are assessed and defined, and these can provide a framework for determining the significance of waste impacts. The significance of waste-related impacts is often determined by the magnitude of the waste generated, the sensitivity of the environment or receptors, and the capacity of local infrastructure to manage waste sustainably.
- 15.60 The IEMA Guidelines provide broad principles for determining the significance of impacts, including those related to waste. Although not specifically focused on waste, the guidelines recommend assessing the magnitude of impact, the sensitivity of the receptors (e.g., local waste infrastructure), and the likelihood of significant effects. They emphasise professional judgment in evaluating waste impacts and ensuring that all waste-related aspects of a development are considered, from construction to decommissioning.
- 15.61 Key factors to consider in defining significance include:
- Magnitude of the waste impact: The quantity of waste produced in relation to the local and regional waste infrastructure capacity.
 - Type of waste: Whether the waste is hazardous or non-hazardous, and its potential environmental impact.
 - Waste disposal and treatment options: The availability and capacity of recycling and treatment facilities in the region.
 - Policy and legal context: Alignment with local, regional, and national waste policies and objectives, particularly the waste hierarchy.
- 15.62 DEFRA has produced a range of guidance related to waste management in the UK, particularly around compliance with The Waste (England and Wales) Regulations 2011. These guidelines stress the importance of adhering to the waste hierarchy (prevention, reuse, recycling, recovery, and disposal), and while they don't specifically address EIA significance, they underscore the need to reduce waste impacts. In the context of an EIA, any deviation from this hierarchy could be seen as having a significant impact, depending on the volume and type of waste involved.
- 15.63 A key document that provides a structured approach to assessing waste in an EIA is DMRB LA110 (Design Manual for Roads and Bridges), which focuses on the assessment of materials and waste in road projects. While the DMRB is intended primarily for highways projects, the methodology it presents can be applied more broadly across different types of development.
- 15.64 DMRB LA110 provides detailed guidance on assessing the impacts of waste and materials in the context of road projects. It outlines a framework for assessing the generation, use, and management of waste, as well as the impacts on resource availability. This guidance can serve as a useful reference for assessing waste impacts in other sectors, offering a clear

methodology for calculating the significance of waste-related impacts.

15.65 DMRB LA110 identifies two primary criteria for assessing the significance of waste impacts:

- **Sensitivity of Receptors:** This refers to the capacity of waste management infrastructure and the natural environment to absorb or accommodate waste impacts. Sensitivity is rated as high, medium, or low, depending on the vulnerability of the receptors (e.g., landfill capacity, regional recycling facilities).
- **Magnitude of Impact:** Defined by the amount of materials used or waste generated. Magnitude is classified as major, moderate, minor, or negligible, depending on the scale of the project and its impact on local and regional waste infrastructure.

Assessing Waste Sensitivity

15.66 The sensitivity of waste relates to availability of regional (and where appropriate, national) landfill void capacity in the absence of the Proposed Development. Landfill capacity is recognised as an unsustainable and increasingly scarce option for managing waste. The following definitions will be to determine the sensitivity of landfill void and regional infrastructure (such as energy from waste) capacity for both inert and hazardous wastes.

15.67 The IEMA Guide to Materials and Waste in EIA divides the assessment of the sensitivity into the sensitivity of materials as a receptor and the sensitivity of landfill void capacity.

Table 15.1 Sensitivity of Waste Receptors

Sensitivity	Description (Inert waste)	Description (Hazardous waste)
Very High	...reduce very considerably (by >10%); end during construction or operation; is already known to be unavailable; or, would require new capacity or infrastructure to be put in place to meet forecast demand.	.. reduce very considerably (by >1%); end during construction or operation; is already known to be unavailable; or, would require new capacity or infrastructure to be put in place to meet forecast demand.
High	...reduce considerably: by 6-10% as a result of wastes forecast.	...reduce considerably: by 0.5-1% as a result of wastes forecast.
Medium	...reduce noticeably: by 1-5% as a result of wastes forecast.	...reduce noticeably: by 0.1- 0.5% as a result of wastes forecast.
Low	..reduce minimally: by <1% as a result of waste forecasts.	..reduce minimally: by <0.1% as a result of waste forecasts.

Sensitivity	Description (Inert waste)	Description (Hazardous waste)
Negligible	...remain unchanged, or is expected to increase through a committed change in capacity.	...remain unchanged, or is expected to increase through a committed change in capacity.

15.68 The sensitivity of materials can be determined by identifying where one or more of the criteria displayed in Table 15.2 are met.

Table 15.2 Assessment criteria for the sensitivity of material receptors

Sensitivity	Description (Materials)
Negligible	Are forecast (through trend analysis and other information) to be free from known issues regarding supply and stock; and/or are available comprising a very high proportion of sustainable features and benefits compared to industry-standard materials.
Low	Are forecast (through trend analysis and other information) to be generally free from known issues regarding supply and stock; and/or are available comprising a high proportion of sustainable features and benefits compared to industry-standard materials.
Medium	Are forecast (through trend analysis and other information) to suffer from some potential issues regarding supply and stock; and/or are available comprising some sustainable features and benefits compared to industry-standard materials
High	Are forecast (through trend analysis and other information) to suffer from known issues regarding supply and stock;

Sensitivity	Description (Materials)
	And/or comprise little or no sustainable features and benefits compared to industry-standard materials.
Very High	Are known to be insufficient in terms of production, supply and/or stock; and/or comprise no sustainable features and benefits compared to industry-standard materials.

Table 15.3 Inert and non-hazardous landfill void capacity sensitivity

Sensitivity	Description (landfill void capacity)
Across construction and/or operation phases, the baseline/future baseline (i.e., without development of regional (or where justified, national) inert and non-hazardous landfill void capacity is expected to...	
Negligible	...remain unchanged or is expected to increase through a committed change in capacity.
Low	...reduce minimally: by <1% as a result of wastes forecast.
Medium	...reduce noticeably: by 1-5% as a result of wastes forecast.
High	...reduce considerably: by 6-10% as a result of wastes forecast.
Very High	... reduce very considerably (by >10%); end during construction or operation; is already known to be unavailable; or would require new capacity or infrastructure to be put in place to meet forecast demand

Table 15.4 Hazardous landfill void capacity sensitivity

Sensitivity	Description (hazardous landfill void capacity)
<p>Across construction and/or operation phases, the baseline/future baseline (i.e., without development of regional (or where justified, national) hazardous landfill void capacity is expected to...</p>	
Negligible	...remain unchanged or is expected to increase through a committed change in capacity.
Low	...reduce minimally: by <0.1% as a result of wastes forecast.
Medium	...reduce noticeably: by 0.1-0.5% as a result of wastes forecast.
High	...reduce considerably: by 0.5-1% as a result of wastes forecast.
Very High	... reduce very considerably (by >1%); end during construction or operation; is already known to be unavailable; or would require new capacity or infrastructure to be put in place to meet forecast demand.

Assessing Magnitude of Effect

15.69 The approach to assessing the magnitude of effect under DMRB LA110 focuses on evaluating the amount of material used and waste generated by a project, particularly in the context of highways and infrastructure projects. The magnitude of effect is classified into four categories: Major, Moderate, Minor, and Negligible. These categories reflect the scale of the potential impact, which is determined by the quantity of waste or materials involved and the extent to which this will affect waste management infrastructure or resource availability:

15.70 The IEMA methodology¹ divides the assessment of magnitude of impact into the sensitivity of materials as a receptor and the sensitivity of landfill void capacity.

15.71 The magnitude of impact from materials can be determined using Table 15.5.

Table 15.5 Assessment criteria for the magnitude of impacts from materials

Magnitude	Description (Materials)
The assessment is made by determining whether, through a development, the consumption of:	
No change	...no material is required.
Negligible	...no individual material type is equal to or greater than 1% by volume of the regional baseline availability.
Minor	<p>...one or more materials is between 1-5% by volume of the regional baseline availability; and/or</p> <p>the development has the potential to adversely and substantially impact access to one or more allocated mineral site (in their entirety), placing their future use at risk.</p>
Moderate	<p>...one or more materials is between 6-10% by volume of the regional baseline availability; and/or</p> <p>one allocated mineral site is substantially sterilised by the development rendering it inaccessible for future use.</p>
Major	<p>...one or more materials is >10% by volume of the regional baseline availability; and/or</p> <p>more than one allocated mineral site is substantially sterilised by the development rendering it inaccessible for future use.</p>

15.72 The magnitude of impact from inert and non-hazardous waste can be determined using Table 15.6.

Table 15.6 Assessment criteria for the magnitude of impacts from inert and non-hazardous waste

Magnitude	Description (inert and non-hazardous waste)
No change	Zero waste generation and disposal from the development.
Negligible	Waste generated by the development will reduce regional landfill void capacity baseline by <1%.
Minor	Waste generated by the development will reduce regional landfill void capacity baseline by 1-5%.
Moderate	Waste generated by the development will reduce regional landfill void capacity baseline by 6-10%.
Major	Waste generated by the development will reduce regional landfill void capacity baseline by >10%.

15.73 The magnitude of impact from hazardous waste can be determined using Table 15.7.

Table 15.7 Assessment criteria for the magnitude of impacts from hazardous waste

Magnitude	Description (hazardous waste)
No change	Zero waste generation and disposal from the development.
Negligible	Waste generated by the development will reduce national landfill void capacity baseline by <0.1%.
Minor	Waste generated by the development will reduce national landfill void capacity baseline by 0.1-0.5%.
Moderate	Waste generated by the development will reduce national landfill void capacity baseline by 0.5-1%.

Major	Waste generated by the development will reduce national landfill void capacity baseline by >1%.
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Assessing Significance of Effect

15.74 The Proposed Development’s baseline and assessment data and forecasts (the magnitude of change on sensitive receptors) will be compared to evaluate the Proposed Development’s significance of effect.

15.75 DMRB LA110 provides a significance matrix, which is based on the combination of magnitude and sensitivity to determine the significance of waste impacts. This matrix has been adopted for this purpose and helps in categorising impacts as either:

- Negligible: No significant impact.
- Minor: A minor impact, typically when waste volumes are low and there is sufficient capacity in waste infrastructure.
- Moderate: An intermediate impact, possibly where waste volumes are higher but infrastructure can manage the demand.
- Major: A significant impact, often due to high waste volumes or inadequate waste management infrastructure.

15.76 For example, if a project is expected to generate a large volume of waste, but the local waste infrastructure has limited capacity, the impact would likely be categorised as "significant." Conversely, if the project produces relatively little waste and the region has ample recycling and waste management facilities, the impact might be considered "negligible" or "minor."

15.77 The potential for significant environmental effects is determined by considering the scale and nature of impacts within the context of the sensitivity of receptors affected, as outline in Table 15.8 below.

Table 15.8 Significance of Effect Matrix

Sensitivity of Receptor	Magnitude of Effect				
		Negligible	Minor	Moderate	Major
Very High	Negligible	Negligible	Moderate	Major	Major
High	Negligible	Negligible	Moderate	Moderate	Major
Medium	Negligible	Negligible	Minor	Moderate	Moderate
Low	Negligible	Negligible	Negligible	Minor	Minor
Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

15.78 Where effects result in a Moderate to Major effect, they will be deemed ‘Significant’.

PRELIMINARY ASSESSMENT OF POTENTIAL EFFECTS

Likely effects during the Construction phase

15.79 The construction of the Proposed Development will generate quantities of excavated material and other aggregate materials mainly associated with the excavation of cuttings, foundations and drainage. In addition, the demolition of existing buildings within the DCO Site will generate demolition materials such as steel, broken concrete, timber, stone and brick. The construction of new highways, logistics units and trackside infrastructure will also generate construction waste. Natural, uncontaminated and contaminated excavated material is likely to be generated as a result of construction of the Proposed Development. It is likely that the majority of the excavated material will comprise natural and inert soils, as well as limestone (mineral resources). Though not confirmed at this stage, there is a potential for hazardous wastes to be present as a result of agriculture practices, however following our desk-based analysis, we do not anticipate large quantities – this will be resolved following additional surveys as outlined above.

15.80 Excavated material that can be used, in its natural state, for site engineering and restoration purposes will be excluded from the assessment of likely significant environmental effects of construction. This is in accordance with the scope of the Waste Framework Directive and also assumed that such materials will meet the requirements of The Definition of Waste: Development Industry Code of Practice.

15.81 In line with the Waste (England and Wales) Regulations 2011, the Proposed Development will be expected to ensure sustainable waste management is implemented through the waste hierarchy as follows:

- prevention;
- preparing for reuse;
- recycling;
- other recovery, including energy recovery; and
- disposal, only as a last resort.

15.82 The cut/fill earthworks strategy will aim to achieve a balance at the DCO Site. If this cannot be achieved, the timescales for the Proposed Development allows receiver sites to be found as the Proposed Development progresses to avoid disposal of material to landfill, if there is surplus material. Re-use of soil materials would be facilitated under a Site Waste and Material Management Plan (SWMMP) under the CL:AIRE Definition of Waste Code of Practice (DoWCoP) prepared prior to development commencing. .

Likely effects during the Operational phase

15.83 During the operational phase of the Proposed Development, waste management becomes a key consideration due to the diverse activities that will take place across the DCO Site. The likely effects of waste will stem from ongoing logistics operations, including handling and processing of goods, maintenance activities, and general site management. Below is an outline of the main waste-related effects anticipated during the operational phase.

Generation of Commercial and Industrial Waste

15.84 The Proposed Development will likely generate significant quantities of commercial I waste, including packaging materials, pallets, cardboard, plastics, metal scraps, and waste from maintenance activities. The volume and type of waste will vary depending on the tenants and users of the facility, as well as the nature of the goods being transported and stored. The management of this waste will need to comply with local and national waste regulations and could place additional demands on local waste infrastructure, particularly in terms of recycling and disposal capacity.

Hazardous Waste

15.85 Operational activities may result in the generation of hazardous waste, particularly from the maintenance and servicing of rail infrastructure and freight vehicles. Hazardous waste could include oils, chemicals, batteries, and other materials that require special handling and disposal. The improper management of hazardous waste could pose risks to the environment, including soil and water contamination, and would require stringent controls to ensure compliance with waste management legislation.

Office and General Waste

15.86 In addition to industrial and commercial waste, there will be ongoing generation of office and general waste from administrative buildings and staff facilities within the proposed SRFI facility. This will likely include paper, food waste, and other non-hazardous waste streams. Effective waste segregation and recycling programs will be essential to minimise the amount of waste sent to landfill and to support sustainability objectives.

Waste from Facility Maintenance

15.87 Waste will also arise from the regular maintenance of the facility, such as rail tracks, terminals, storage areas, and buildings. This may include waste from the replacement of infrastructure parts, cleaning operations, and landscaping activities. The materials generated from such activities may include metals, concrete, and green waste, much of which may be recyclable if appropriate measures are in place.

15.88 Based on the Proposed Development's end uses and anticipated waste streams it is not anticipated that there would be any significant environmental effects from the future waste generation streams by the proposed uses, save for the environmental effects of the collection of waste and secondary effects of emissions and traffic noise associated with waste vehicles.

PROPOSED AVOIDANCE AND MITIGATION MEASURES

15.89 The Waste Hierarchy will be adhered to at all times during both the construction and operational phases to ensure waste arisings are minimised as much as possible.

15.90 During the operational phase, the proposed Development can implement several measures to manage waste sustainably, including:

- Waste minimisation: Encouraging tenants and users to adopt practices that reduce waste at the source.
- Waste segregation: Implementing comprehensive segregation of waste streams to increase recycling rates.
- Partnership with local waste operators: Collaborating with local waste management companies to maximise recycling and recovery efforts and ensure compliance with regional waste strategies.
- Energy recovery: Exploring disposal opportunities for waste-to-energy solutions utilising local / regional facilities, helping reduce reliance on landfill disposal.

15.91 The management and handling of waste at the Proposed Development will have logistical challenges due to the scale and nature of operations. There may be a need for dedicated waste storage and segregation areas, along with appropriate waste collection systems. Poorly managed waste storage could lead to environmental issues, such as littering, odours, or vermin infestations, potentially affecting site operations and the surrounding environment.

15.92 The Proposed Development will need to adhere to relevant waste management legislation,

including compliance with the Waste (England and Wales) Regulations 2011, and the Environmental Permitting Regulations where applicable. This will involve following the waste hierarchy (reduce, reuse, recycle) to minimise waste impacts. Failure to comply could lead to legal and financial consequences, and reputational damage, which may affect the long-term operation of the facility.

- 15.93 The Proposed Development presents opportunities to implement resource-efficient practices, including recycling schemes and initiatives to reduce waste generation. By adopting sustainable waste management practices, the facility can reduce its environmental footprint, minimise costs associated with waste disposal, and align with corporate social responsibility goals. Additionally, collaboration with tenants and operators could lead to innovations in packaging reduction, material reuse, and circular economy practices.
- 15.94 A standalone Site Waste and Materials Management Plan (SWMMP) will be submitted with the application. The SWMMP will set out the roles and responsibilities relating to waste management during construction. It will also set out specific mitigation measures which will ensure the management of waste will be undertaken in accordance with the Waste Hierarchy during both the construction and operational phases.

UNCERTAINTIES

- 15.95 At this preliminary and outline stage, it is important to note that the specific end users of the Proposed Development have not yet been defined, nor will they be known before the DCO decision. As a result, it is not possible to accurately quantify all waste arisings during both the construction and operational phases of the Proposed Development. Any estimates provided as part of the future waste and materials assessment will therefore be theoretical, based on typical waste generation patterns for similar developments and use types accounting for the total scale (floor space). To account for this uncertainty, the estimations will be conservative, with margins of error built in to ensure that the potential impacts are not underestimated. As more detailed information becomes available, these estimates will be refined to provide a more accurate assessment.

SUMMARY OF PROPOSED EIA SCOPE

- 15.96 The Waste and Materials chapter will assess the likely significant effects of the Proposed Development on local and regional waste management infrastructure. The assessment will focus on both the construction and operational phases of the development, including waste generated from demolition, construction, and day-to-day operations. The evaluation will address the Proposed Development's compliance with the waste hierarchy, which prioritises waste prevention, reuse, recycling, and recovery over disposal.

Key Aspects to be Scoped In:

- 15.97 **Construction Waste:** Waste arisings from demolition and construction (C&D), such as concrete, bricks, metals, wood, and other materials, will be scoped into the EIA. The potential environmental impacts associated with C&D waste must be thoroughly assessed to understand the strain it could place on local waste infrastructure and identify opportunities for sustainable waste management.

15.98 **Operational Waste:** Waste arisings during the operational phase of the Proposed Development will be scoped into the EIA. This will include waste generated from commercial, and logistical activities, as well as general office waste. The assessment will evaluate how this waste could affect local waste management systems and ensure compliance with regulatory standards. The EIA will also explore opportunities to minimise operational waste and increase recycling and reuse rates.

Consultation and Methodology:

15.99 The assessment will be informed by consultations with key stakeholders, including local authorities, the Waste and Minerals Planning Authority, and the Environment Agency. A desk-based review will gather relevant waste data, while initial site walkovers will assess waste storage and management practices on-site. The EIA will also incorporate best practices and guidelines, such as the IEMA Guidelines for EIA and DMRB LA110, to evaluate the significance of waste impacts, considering the volume of waste generated, the sensitivity of waste receptors, and local infrastructure capacity.

15.100 The EIA will consider potential cumulative impacts, especially if the Proposed Development is part of a broader industrial or logistics hub, which could place additional strain on regional waste management facilities. A Site Waste and Materials Management Plan (SWMMP) will be prepared to ensure waste minimisation, recycling, and sustainable waste handling throughout the construction and operational phases.

15.101 This comprehensive assessment aims to ensure the Proposed Development aligns with national and local waste management policies, minimises environmental impacts, and promotes resource efficiency.

15.102 Potential effects upon minerals resource planning will be addressed within Chapter 14: Ground Conditions.

Table 15.9 Summary of Materials and Waste impacts proposed to be scoped in and out of the EIA

Impacts	Scoped in or out?	Justification
Construction		
Waste arisings from demolition	In	Waste arisings from demolition and construction (C&D) should be scoped into the EIA due to the significant potential environmental impacts associated with demolition activities. C&D generates substantial volumes of waste, including concrete, brick, metals, wood, and other construction materials, which need to be carefully managed to
Waste arisings from enabling works and construction	In	

Impacts	Scoped in or out?	Justification
		prevent adverse effects on local waste infrastructure and the environment.
Operation		
Waste arisings during operation	In	Waste arisings from the operation of a SFRI should be scoped into the EIA due to the significant volumes of commercial, and general waste generated by ongoing logistics and operational activities. Proper assessment is necessary to evaluate the potential strain on local waste management infrastructure, ensure compliance with waste regulations, and identify opportunities for waste reduction, recycling, and sustainable management practices. Additionally, the operational waste could have long-term environmental impacts if not adequately mitigated, making it essential to address in the EIA.

Chapter 16 ◆ Energy and climate change

INTRODUCTION

16.1 This Scoping Chapter has been prepared by Ridge and Partners LLP and sets out the proposed scope, approach and methodology for the future assessment of:

- the effects of the Proposed Development on climate change, i.e. the extent to which the Proposed Development will result in Greenhouse Gas (GHG) emissions
- the effects of climate change upon the Proposed Development, i.e. the resilience of the Proposed Development to the potential future effects of climate change

16.2 In line with the EIA Regulations, this Scoping Report chapter has been compiled by appropriately qualified, experienced, and competent experts. This chapter has been written by Susie Sidley, a Sustainability Partner at Ridge & Partners LLP. Susie has an Environmental Science BSc undergraduate degree and an Environment and Business MA. She is a full member of IEMA and a Chartered Environmentalist. She has 20 years of technical experience in Sustainability Consultancy.

RELEVANT LAW, POLICY AND GUIDANCE

16.3 The DCO will be assessed against the Infrastructure Planning (Decisions) Regulations 2010 and National Networks National Policy Statement ('NPSNN', adopted 2024). The National Planning Policy Framework ('NPPF', 2023) and relevant local planning policy are material considerations.

16.4 A summary of legislation particularly relating to Climate Change is provided in the following paragraphs.

Legislation

16.5 The Climate Change Act 2008 committed the UK to an 80% reduction in carbon emissions relative to the levels in 1990, to be achieved by 2050. The UK Government set carbon budgets 1 to 5 to meet the 80% emission reduction target.

16.6 The Paris Agreement is a legally binding international treaty on climate change. It was adopted by 196 Parties at the UN Climate Change Conference (COP21) in Paris, France, on 12 December 2015. It entered into force on 4 November 2016. Its overarching goal is to hold *'the increase in the global average temperature to well below 2°C above pre-industrial levels'* and pursue efforts to *'limit the temperature increase to 1.5°C above pre-industrial levels.'*

16.7 In June 2019, secondary legislation was passed in the UK that extended the 80% emission

target set in 2008 to require that the UK reduce all greenhouse gas emissions to net zero by 2050 relative to 1990 levels. In April 2021, the Government confirmed its intention to ratify 'The Sixth Carbon Budget' which effectively requires a 78% reduction in UK territorial emissions between 1990 and 2035. The UK's Nationally Determined Contribution is on the pathway to the 2050 net zero target.

- 16.8 Paragraph 4(5) of Schedule 4 of the EIA Regulations (as amended) require *'a description of the likely significant effects of the development on the environment resulting from'...*(f) *the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change'.*

Policy

National Policy Statement for National Networks (March 2024)

- 16.9 For nationally significant road, rail and strategic rail freight infrastructure projects (as defined in the Planning Act 2008), the National Policy Statement for National Networks (NPSNN) sets out the primary policy objectives.
- 16.10 Paragraphs 2.29 and 2.30 of the NPSNN state that *'rail freight is estimated to reduce emissions on average by 76% per tonne per km travelled when compared to road freight, equating to around 1.4m tonnes of carbon dioxide emissions saved each year. Rail is one of the most carbon efficient ways of moving goods over long distances and can also reduce congestion – depending on its load, each freight train can remove up to 76 Heavy Goods Vehicles from the road. The rail freight industry resulted in 5.56 million fewer lorry journeys in 2020/21. In addition to the commitments above, the Plan for Rail committed to setting a growth target for rail freight. The effective development of SRFIs (and other rail freight interchanges) and other key enablers in the right places, will also help realise the full range of environmental benefits that rail freight can offer.'*
- 16.11 Paragraph 4.27 of the NPSNN sets out four Design Principles developed by the National Infrastructure Commission, one of which focuses on climate, covering both mitigation of carbon emissions and adaptation to climate change. It *'includes opportunities to enable decarbonisation, incorporates flexibility, and builds resilience against climate change. The functionality of projects, including fitness for purpose, resilience and sustainability, is equally important'.*
- 16.12 The NPSNN provides guidance on assessment of carbon emissions associated with infrastructure project, confirming in paragraph 5.33 that a *'Whole Life Carbon Assessment should be conducted according to the guidance, standards and methodologies set out in Transport Analysis Guidance Unit A3'.* It further highlights that *'where it provides useful context, applicants may wish to compare their scheme emissions against carbon budgets, net zero and the UK Nationally Determined Contribution. Where an applicant assesses the carbon impacts of its scheme against carbon budget 6, and later carbon budgets, it is to be taken also to have assessed the carbon impacts of the scheme against the net zero target in the Climate Change Act 2008, as they are in line with this target.'*
- 16.13 With regards to mitigation relating to carbon emissions, the NPSNN advises in paragraph 5.36 that *'applicants should look for opportunities within the design of the proposed development*

to embed nature-based or technological solutions to mitigate, capture or offset the emissions of construction’.

16.14 The NPSNN also provides guidance on climate adaptation, stating in paragraph 4.34 that: *‘while climate change mitigation is essential in minimising the most dangerous impacts of climate change, previous global carbon emissions have already committed us to continued climate change in the future’*, and in paragraph 4.37 that *‘applicants must consider the direct (e.g., flooding of road or rail infrastructure) and indirect (e.g., flooding of other parts of the road or rail network) impacts of climate change when planning the location, design, build, operation and maintenance.’*

16.15 With regards to measures to support climate adaptation, the NPSNN further advises in paragraph 4.38 that *‘applicants should consider whether nature-based solutions could provide a basis for such adaptation. In addition to avoiding further carbon emissions when compared with some more traditional adaptation approaches, nature-based solutions can also result in biodiversity benefits as well as increasing absorption of carbon dioxide from the atmosphere’.*

National Planning Policy Framework 2023

16.16 Section 14 of the National Planning Policy Framework 2023 (NPPF) specifically addresses the challenge of climate change. Paragraph 159 states that: *‘New development should be planned for in ways that:*

- *avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure; and*
- *can help to reduce greenhouse gas emissions, such as through its location, orientation and design. Any local requirements for the sustainability of buildings should reflect the Government’s policy for national technical standards.’*

16.17 A revised NPPF is currently undergoing through the consultation process: Consultation Draft (2024). This includes Chapter 9: *‘Supporting green energy and the environment’* which *‘seeks views on revisions to the NPPF to increase support for renewable energy schemes, tackle climate change and safeguard environmental resources’*. Amendments proposed within the consultation draft includes proposals to further support renewables, including a proposal to increase the threshold at which solar projects are determined as Nationally Significant to 150MW. It also includes suggestions that the national planning policy could be improved with regards to climate change mitigation and adaptation.

Plans and Strategies

St Helens Borough Climate Response Plan

16.18 In 2019 St Helens Borough Council declared a climate emergency *‘in recognition of the existential threat posed by rising temperatures across the world’* (Climate Response Plan,

2021). The Council set a target to achieve net zero by 2040 and a plan to achieve this is set out within their Climate Response Plan published in November 2021.

St Helens Borough Local Plan up to 2037

16.19 The St Helens Borough Local Plan was published in July 2022, and include a number of references to the Council's climate emergency declaration. Policy LPA01 which outlines a spatial strategy for the Borough. One of the requirements within the spatial strategy is for new development proposals *'to mitigate their contribution to climate change and to adapt to its impacts'*.

16.20 In addition, the Local Plan includes Policy LPA02 which sets out development principles which new development will be required to support. This includes the need to *'lower St Helens Borough's carbon footprint and adapt to the effects of climate change by:*

a) Contributing to reductions in carbon emissions from all sources;

b) Meeting appropriate standards for sustainability and energy efficiency and promoting the use of renewable energy and sustainable construction;

c) Assessing and addressing the impact of climate change through mitigation and / or adaptation measures;

d) Using water, energy, minerals and waste resources in an efficient and effective way;

e) Ensuring that all new development addresses the need to mitigate and, where appropriate, adapt to flood risk; and

f) Making best use of existing building materials (including historic features and materials) in order to reduce waste and lower energy consumption.'

16.21 Policy LPC13, Renewable and Low Carbon Energy Development' sets out a requirement for new developments *'to meet high standards of sustainable design and construction and minimise carbon emissions equivalent to CSH level 4, i.e. 19% carbon reduction against Part L 2013 unless proven unviable. To this end they should use energy efficiently and where feasible incorporate decentralised energy systems that would use or generate renewable or other forms of low carbon energy. Large scale schemes that would generate a significant source or demand for heat should also be supported by evidence considering the feasibility of serving the development by means of a district heating scheme. Proposals for new development within a strategic employment site or a strategic housing site (as defined in Policies LPA03.1 and LPA04.1) must, unless this is shown not to be practicable or viable, ensure that at least 10% of their energy needs can be met from renewable and / or other low carbon energy source(s).'*

Places for Everyone Joint Development Plan

16.22 The Places for Everyone Joint Development Plan (2024) is the document for Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Tameside, Trafford and Wigan. With respect to climate change and sustainability considerations, the following policies are included within the Places for Everyone Joint Development Plan.

16.23 Policy JP-S2: Carbon and Energy states that *'the aim of delivering a carbon neutral Greater Manchester no later than 2038, with a dramatic reduction in greenhouse gas emissions, will be supported through a range of measures including:*

- *Promoting the retrofitting of existing buildings with measures to improve energy efficiency and generate renewable and low carbon energy, heating and cooling;*
- *Promoting the use of life cycle cost and carbon assessment tools to ensure the long-term impacts from development can be captured;*
- *Taking a positive approach to renewable and low carbon energy schemes, particularly schemes that are led by, or meet the needs of local communities; and*
- *Increasing the range of nature-based solutions including carbon sequestration through the restoration of peat-based habitats, woodland management, tree-planting and natural flood management techniques.*

There is an expectation that new development will, unless it can be demonstrated that it is not practicable or financially viable;

- *Be net zero carbon which applies:*
- *from adoption– to regulated operational carbon emissions;*
- *from 2028 - to all emissions 'in construction'.*
- *From 2025 development should also calculate and minimise carbon emissions from unregulated emissions alongside regulated emissions.*

Development proposals should set out how this has been achieved in an energy statement in accordance with the energy hierarchy, which in order of importance seeks to:

- *Minimise energy demand;*
- *Maximise energy efficiency;*
- *Use renewable energy;*
- *Use low carbon energy; and*
- *Utilise other energy sources.*

From 2025 any residual carbon emissions that cannot be fully mitigated on-site should be offset, in agreement with the relevant local planning authority through a financial contribution to a carbon offset fund. As an interim measure, development should be consistent with the 2022 Part L Building Regulations unless superseded by changes to building regulations and/or national or local planning policies.'

- 16.24 In relation to climate adaptation, Policy JP-S4: Flood Risk and the Water Environment states that *'Greater Manchester is located within a complex hydrological network that extends into surrounding districts and beyond. This means that individual areas cannot be viewed in isolation, as rainfall and activities in one place can have significant impacts on the water environment in other locations. Climate change is expected to significantly increase peak river flows and surface water run-off as a result of more intense rain events, potentially placing many more properties at risk in the future unless flood defences, drainage and run-off management are improved. A coordinated catchment-wide approach to all types of flood risk will be required to address these challenges and minimise potential harm to people and property, including actions upstream of Greater Manchester.'*
- 16.25 The Policy further states that *'Sustainable Drainage System (SuDS) schemes can provide appropriate solutions to addressing both flood risk and water quality issues and are mandatory for major development unless clear evidence indicates that they would be inappropriate.'* On water conservation, the policy states that *'it is important that water is conserved and efficiently used as much as possible to help build resilience to periods of drought; avoid over abstraction; reduce carbon emissions from water treatment and disposal; and protect river and wetland habitats from degradation.'*

Wigan Local Plan- Core Strategy'

- 16.26 The Wigan Local Plan Core Strategy was adopted in September 2013. Since March 2024, several policies have been replaced by policies in the Places for Everyone Plan and no longer form part of the borough's Development Plan. However, Policy CP 10 which is still included in the Local Plan has a requirement for new development to include *'measures to minimise the impact of and adapt to climate change and conserve natural resources and meets established national standards for sustainability and national carbon reduction targets'*.

Wigan Council Outline Climate Change Strategy

- 16.27 Wigan Council declared a climate emergency in 2019. Following this, they published the Outline Climate Change Strategy in 2020 which sets out Wigan Council's ambition and a road map for tackling climate change challenges. National guidance

IEMA (2022) Assessing Greenhouse Gas Emissions and Evaluating their Significance (2nd Edition)

- 16.28 This document is the key guidance for assessing the impact of a project on climate change. It reflects the 2019 amendment to the UK's legally binding Climate Change Act 2008 in response to the Paris Agreement, setting a new and challenging target to reduce UK GHG emissions to net zero by 2050. The guidance confirms that all emissions contribute to climate change, however specifically in the EIA context it provides relative significance descriptions to assist assessments. It sets out levels of significance which are not solely based on whether a project emits GHG emissions alone, but how the project makes a relative contribution towards achieving a science-based 1.5°C aligned transition towards net zero.

IEMA (2020) EIA Guide to: Climate Change Resilience & Adaptation

- 16.29 This document provides guidance for considering the vulnerability of a project to climate change (climate change resilience). It provides a framework for the effective consideration of

climate change resilience and adaptation in the EIA process.

RIBA (2021) RIBA 2030 Climate Challenge v2

- 16.30 The Royal Institute of British Architects (RIBA) have developed the RIBA 2030 Climate Challenge which sets out voluntary performance targets to achieve the reductions needed so that the UK building stock can achieve net zero carbon by 2050. The voluntary operational energy and water use and embodied carbon performance targets that are set out in the 2030 Climate Challenge have been developed by the RIBA consultation with experts across the industry. The targets consider the latest recommendations from the Green Construction Board and are aligned with other built environment professional bodies.
- 16.31 Within the RIBA 2030 Climate Challenge, operational energy is measured in terms of energy efficiency rather than just GHG emissions and is expressed in kWh/m²/year. Embodied GHG emissions (also referred to as Embodied Carbon) are expressed in terms of CO₂eq.

UK Net Zero Carbon Buildings Standard Pilot Version

- 16.32 The pilot version of a new UK Net Zero Carbon Buildings Standard (UKNZCBS) was published in September 2024. This includes *‘technical details on how a building should meet the Standard, including what limits and targets it needs to meet, the technical evidence needed to demonstrate this and how it should be reported. In the future, projects will be able to verify that a project conforms to the Standard.’*
- 16.33 The UKNCZBS includes specific limits for each year from 2025 to 2050 for upfront carbon and operational energy. The UKNZCBS also uses energy use intensity as a metric for operational energy (kWh/m²GIA/yr) and CO₂eq for upfront carbon.

CONSULTATION TO DATE

- 16.34 No consultation has been undertaken at this stage, however, it is proposed to consult with Climate Change officers at each relevant regional / local authority as part of the pre-application process for the DCO.

BASELINE CONDITIONS AND MAIN ISSUES

Baseline environment

Impact of the Proposed Development on climate change

- 16.35 In relation to the impact of the Proposed Development on climate change, i.e. GHG emissions, the baseline is a scenario whereby the Proposed Development does not proceed, and the DCO Site remains as it is. The DCO Site currently comprises predominantly agricultural land but there are also a small number of residential dwellings, an airfield, commercial premises and farmsteads. There will therefore currently be some GHG emissions associated with these uses. As detailed information on the current GHG emissions associated with the existing uses on site is not available, it is assumed for the purposes of this assessment that there are no

significant GHG emissions associated with the DCO Site in the baseline scenario. This will reflect a worst-case scenario and will enable a clear indication of the climate change impacts of the Proposed Development.

Climate change resilience

16.36 The existing baseline for the climate change resilience assessment is the current climate in the location of the Proposed Development. Historic climate data obtained from the Met Office website (accessed September 2024) recorded by the closest meteorological station to the Proposed Development that gathers climate data (Crosby Station) for the 30-year climate periods of 1961-1990 and 1991-2020 is summarised in Table 16.1¹. This shows an increase in the average annual maximum daily temperature, but a slight reduction in the mean annual rainfall.

Table 16.1 Historic climate data recorded by the closest meteorological station

Climate Period	1961-1990		1991-2020	
Climatic Factor	Month	Figure	Month	Figure
Average annual maximum temperature (°C)	-	12.55°C	-	13.57°C
Warmest month (maximum temperature) (°C)	July	18.87°C	July	19.99°C
Coldest month (maximum temperature) (°C)	February	6.51°C	January	7.49°C
Mean annual rainfall levels (mm)	-	839.32mm	-	824.32mm
Wettest month on average (mm)	October	87.27mm	December	91.86mm
Driest month (mm)	April	52.57mm	April	49.83mm

¹ [Crosby \(Merseyside\) UK climate averages - Met Office](#)

- 16.37 The Met Office website (accessed September 2024) confirms that past severe weather events in the last 5 years have included record breaking heatwaves, severe flooding, severe winter weather with significant snowfalls, and storm and high wind events.
- 16.38 UK Climate Projections published in 2018 (UKCP18) have been developed by the UK Climate Impacts Programme (UKCIP) to provide projections for future climate scenarios and trends. This shows that climate change over the next few decades is likely to mean milder wetter winters and hotter drier summers in the UK, while sea levels will continue to rise alongside changes in rainfall patterns.
- 16.39 Table 16.2 shows the probabilistic climate projections component of the past (observed) and future climate scenario projections data, produced as part of the UKCP18 project. Data has been produced by the UK Met Office Hadley Centre. These further support the prediction of potentially milder wetter winters and hotter drier summers.

Table 16.2 UKCP Data for the North West Region using RCP² 8.5 (change from baseline 2010)

Season	Variable	Period	Percentile		
			10th	50th	90th
Summer	Mean Air Temperature	2020-2039	0.2	1	1.9
		2080-2099	2.2	4.8	7.4
	Average precipitation rate (%)	2020-2039	-20	-3	12
		2080-2099	-57	-33	-3
Winter	Mean Air Temperature	2020-2039	-0.1	0.7	1.6
		2080-2099	1.1	3.1	5.2
	Average precipitation rate (%)	2020-2039	-6	6	18

² RCPs (Representative Concentration Pathways) are a method for capturing assumptions, about changes to the environment that will influence climate change, within a set of scenarios. The conditions of each scenario are used in the process of modelling possible future climate evolution. RCP8.5 is a pathway where greenhouse gas emissions continue to grow unmitigated, leading to a best estimate global average temperature rise of 4.3°C by 2100 and therefore represents the worst case scenario.

Season	Variable	Period	Percentile		
			10th	50th	90th
		2080-2099	2	27	56

Proposed approach to surveys and further baseline data collection

16.40 No additional surveys or data collection is required as the information collected above is sufficient in establishing the baseline.

APPROACH AND METHODOLOGY

Scope of assessment

16.41 In accordance with the EIA Regulations this chapter addresses:

- The impact of the Proposed Development on climate change, in line with IEMA (2022) Assessing Greenhouse Gas Emissions and Evaluating their Significance
- The vulnerability of the Proposed Development to climate change (climate change resilience) in line with IEMA (2020) EIA Guide to: Climate Change Resilience & Adaptation

Impact of the Proposed Development on climate change

Study area

16.42 The study area for the assessment of the impact on climate change is the draft Order Limits but also encompasses GHG emissions arising outside of this boundary, including the embodied emissions associated with construction materials, emissions associated with the transportation of materials to the DCO Site and removal of waste from the DCO Site during construction, and emissions associated with movements to and from the SRFI once operational.

16.43 The assessment focuses on the primary effects that the Proposed Development causes. It does not include an assessment of upstream or downstream effects associated with the manufacture or use of goods that might pass through the SRFI on the basis that this is more appropriately accounted for elsewhere and would be disproportionate to include within the scope of this assessment, since such effects cannot be understood or quantified at this stage.

Data sources

16.44 A Whole Life Carbon (WLC) assessment will be undertaken to estimate the GHG emissions associated with the Proposed Development. This will be undertaken using estimated

materials and assumptions in line with typical benchmarks, initial energy modelling and use of predicted travel data from the transport assessment. In line with IEMA Guidance (2022) a reasonable worst-case approach will be undertaken.

16.45 The following information will be used to inform the assessment:

- Operational Energy Calculations for the buildings within the Proposed Development (BRUKL³ Part L calculations, plus estimation of unregulated energy to determine the energy use intensity)
- Energy Study into low carbon energy supplies
- Embodied Carbon Calculations using 'One-Click' Life Cycle Assessment (LCA) software . This is a well-recognised tool for undertaking LCA and will enable an estimation of embodied carbon associated with the Proposed Development. This will be based on proposed material specifications and their associated areas/volumes
- Transport Assessment considering movements to and from the Proposed Development once operational, as well as quantifying the effect of a switch from road to rail freight.

Predicting effects

16.46 The IEMA (2022) Guide: Assessing Greenhouse Gas Emissions and Evaluating their Significance will be used as a basis for this assessment. This guidance states that: *'The crux of significance'... 'is not whether a project emits GHG emissions, nor even the magnitude of GHG emissions alone, but whether it contributes to reducing GHG emissions relative to a comparable baseline consistent with a trajectory towards net zero by 2050.'*

16.47 Significance should therefore be measured against how the Proposed Development's whole life GHG emissions align with the UK's net zero carbon compatible trajectory. The following approach will therefore be taken.

16.48 As GHG emissions are not geographically limited and have a global effect rather than directly affecting any specific local receptor, the receptor for assessment of the impact of the Proposed Development on climate change is the global atmosphere. The receptor is of high sensitivity, given the severe consequences of global climate change and the cumulative contributions of all GHG emission sources.

16.49 Magnitude is determined in accordance with Table 16.3 which is based on the IEMA (2022) Guide and references the RIBA 2030 Climate Challenge v2 (2021) and the UK Net Zero Carbon Buildings (UKNZCB) Pilot Standard (2024).

³ BRUKL - Building Regulations UK

Table 16.3 Impact on climate change - determining magnitude

Magnitude of Impact	Criteria for assessing impact
Major Adverse	The project’s GHG impacts are not mitigated or are only compliant with do-minimum standards set through regulation, and do not provide further reductions required by existing local and national policy for projects of this type. A project with major adverse effects is locking in emissions and does not make a meaningful contribution to the UK’s trajectory towards net zero. For example, the project’s GHG emissions are in line with the ‘Business as Usual’ thresholds set out within the RIBA 2030 Climate Challenge or are above the 2025 limits within the UKNZCB Standard.
Moderate Adverse	The project’s GHG impacts are partially mitigated and may partially meet the applicable existing and emerging policy requirements but would not fully contribute to decarbonisation in line with local and national policy goals for projects of this type. A project with moderate adverse effects falls short of fully contributing to the UK’s trajectory towards net zero. For example, the project’s GHG emissions are in line with the ‘2025’ targets set out within the RIBA 2030 Climate Challenge or the 2025 limits within the UKNZCB Standard.
Minor Adverse	The project’s GHG impacts would be fully consistent with applicable existing and emerging policy requirements and good practice design standards for projects of this type. A project with minor adverse effects is fully in line with measures necessary to achieve the UK’s trajectory towards net zero. For example, the project’s GHG emissions are in line with the ‘2030’ targets set out within the RIBA 2030 Climate Challenge or the 2030 limits within the UKNZCB Standard.
Negligible	The project’s GHG impacts would be reduced through measures that go well beyond existing and emerging policy and design standards for projects of this type, such that radical decarbonisation or net zero is achieved well before 2050. A project with negligible effects provides GHG performance that is well ‘ahead of the curve’ for the trajectory towards net zero and has minimal residual emissions. For example, the project’s GHG emissions are in line with the 2035 limits within the UKNZCB Standard.

16.50 In addition to the assessment in accordance with the trajectory to net zero, the GHG emissions will be contextualised against the UK carbon budget in line with IEMA Guidance.

16.51 The significance of an environmental impact is determined by the interaction of magnitude and sensitivity, whereby the impacts can be positive or negative. In addition, inherent design mitigation measures which are already being incorporated within the Proposed Development will be taken into account when determining the significance. Table 16.4 demonstrates how significance is determined.

Table 16.4 Impact on climate change – significance matrix

Magnitude	Significance
Major	Major Significance
Moderate	Moderate Significance
Minor	Minor Significance
Negligible	Not Significant

Climate change resilience

Study area

16.52 The study area for the climate change resilience assessment is the Proposed Development itself. To assess the vulnerability of the Proposed Development to climate change, a climate change resilience assessment in line with the Environmental Impact Assessment Guide to: Climate Change Resilience & Adaptation (IEMA, 2020) will be undertaken using the following approach.

Data sources

16.53 The following information will be used to inform the assessment:

- Flood Risk Assessment and Drainage Strategy
- Ecological assessment
- Concept architectural, structural, drainage and landscape drawings
- Design and Access Statement

16.54 Workshops will be held with the design team to run through the climate resilience assessment and to identify inherent and additional mitigation measures, through an iterative process.

Receptors

16.55 Receptor groups will be identified and their sensitivity will be determined based on the susceptibility of the receptor (e.g. ability to be affected by a change – low, medium or high) and the vulnerability of the receptor (i.e. potential exposure to a change – low, medium or high).

- Low susceptibility: receptor has the ability to withstand/not be altered much by the projected changes to the existing/prevaling climatic factors (e.g. retain much of its original function and form).
- Moderate susceptibility: receptor has some limited ability to withstand/not be altered by the projected changes to the existing/prevaling climatic conditions.
- High susceptibility: receptor has no ability to withstand/not be substantially altered by the projected changes to the existing/prevaling climatic factors.
- Low vulnerability: Climatic factors have little influence on the receptors.
- Moderate vulnerability: receptor is dependent on some climatic factors but able to tolerate a range of conditions.
- High vulnerability: receptor is directly dependent on existing/prevaling climatic factors and reliant on these specific existing climate conditions continuing in future or only able to tolerate a very limited variation in climate conditions

16.56 Table 16.5 identifies how the sensitivity of receptors is determined.

Table 16.5 Climate Resilience – Sensitivity of Receptors

	Low vulnerability	Moderate vulnerability	High vulnerability
Low Susceptibility	Low Sensitivity	Low Sensitivity	Moderate Sensitivity
Moderate Susceptibility	Low Sensitivity	Moderate Sensitivity	High Sensitivity

	Low vulnerability	Moderate vulnerability	High vulnerability
High Susceptibility	Moderate Sensitivity	High Sensitivity	High Sensitivity

Magnitude

16.57 Magnitude will be based on a combination of likelihood (the chance of the effect occurring over the lifespan of the Proposed Development if the risk is not mitigated) and consequence (which will reflect the geographical extent of the effect or the number of receptors affected, the complexity of the effect, degree of harm to those affected and the duration, frequency and reversibility of effect).

- Low likelihood: The event may occur once or on limited occasions during the lifetime of the development.
- Moderate likelihood: The event may occur several times during the lifetime of the development.
- High likelihood: The event will occur on multiple occasions during the lifetime of the development.
- Low consequence: Minor disruption to business operations / no risk to building occupants / no damage to buildings / infrastructure.
- Moderate consequence: Some disruption to building operations / slight risk to building occupants / slight damage to buildings / infrastructure.
- High consequence: Major disruption to business operations / risk to building occupants / significant damage to buildings / infrastructure.

16.58 Table 16.6 identifies how the magnitude of effects is determined.

Table 16.6 Climate Resilience – Determining Magnitude

	Low consequence	Moderate consequence	High consequence
Low Likelihood	Minor Magnitude	Minor Magnitude	Moderate Magnitude
Moderate Likelihood	Minor Magnitude	Moderate Magnitude	Major Magnitude

	Low consequence	Moderate consequence	High consequence
High Likelihood	Moderate Magnitude	Major Magnitude	Major Magnitude

16.59 The significance of an environmental impact is determined by the interaction of magnitude and sensitivity, whereby the impacts can be positive or negative. The impact Significance Matrix is set out in Table 16.7.

Table 16.7 Climate resilience - determining significance

Magnitude	High Sensitivity	Moderate Sensitivity	Low Sensitivity
Major	Major Significance	Major Significance	Moderate Magnitude
Moderate	Major Significance	Moderate Significance	Minor Significance
Minor	Moderate Significance	Minor Significance	Minor Significance
Negligible	Not significant	Not significant	Not significant

PRELIMINARY ASSESSMENT OF POTENTIAL EFFECTS

Impact of the Proposed Development on climate change

16.60 A whole life carbon assessment will be undertaken to determine GHG emissions associated with the Proposed Development. This will include assessment of the following possible effects:

- Construction stage GHG emissions, including emissions on site and associated with transport of waste, materials to and from the DCO Site.
- Embodied GHG emissions associated with the materials used for construction of the Proposed Development, including buildings and infrastructure, including extraction and production of the materials, maintenance and replacement.
- Operational GHG emissions, including both energy related GHG emissions associated with the buildings within the Proposed Development and transport related (road and rail) GHG emissions associated with the movement of people and goods to and from the

DCO Site and the generation and treatment of waste, where appropriate.

Climate change resilience

16.61 The climate resilience assessment will consider the following climate change hazards:

- Increased flooding
- Increased likelihood of storms (including high winds)
- More extreme heat and cold events, and greater temperature variation
- Wetter winters
- More drought events (including reduced summer rainfall)
- Warmer summers
- More precipitation e.g. rain and snow
- Subsidence or ground movement

16.62 The climate resilience assessment will consider the possible effects of climate change on the following receptors:

- Building occupiers and other users of the DCO Site
- Buildings
- Infrastructure
- Soft Landscaping

PROPOSED AVOIDANCE AND MITIGATION MEASURES

16.63 Embedded mitigation which already forms part of the Proposed Development includes:

- Landscape strategy that will incorporate elements including tree and shrub planting and surface water features, this will help to reduce overheating associated with climate change.
- A new energy centre will be constructed, photovoltaics will generate energy for the Proposed Development and the warehouse building roofs will be designed to allow for the potential to install photovoltaics on up to 100% of useable roofspace.
- Construction will proceed in accordance with industry standard best practice techniques and that all legislative requirements will be met. Standard measures will be secured through requirements in the DCO, these will include site waste management,

construction environmental management and construction traffic management.

UNCERTAINTIES

- 16.64 The assessment of construction stage GHG emissions will be based on assumptions and a typical benchmark. The actual quantity of GHG emissions is likely to be different to this as will vary depending on the construction materials, construction methods etc. The assessment will be based on a 60-year life span for the buildings within the Proposed Development.
- 16.65 Operational GHG emissions will be calculated using an assessment based on the estimated demand figures with an analysis of typical loading profiles, normal working practices and impact of external climate conditions. Actual GHG emissions are likely to be different to the estimations provided, depending on both detailed design and operational use of the Proposed Development. Unregulated energy use could vary substantially when the Proposed Development is operational, but it is not possible to accurately predict this energy use.
- 16.66 These uncertainties will be overcome by taking a conservative approach to estimations.
- 16.67 The assessment of the impacts of climate change on the Proposed Development will be based on assumptions about the future effects of climate change. The climate change predictions used within the climate resilience assessment will be based on the most recent UK Climate Projections published in 2018 (UKCP18) developed by the UK Climate Impacts Programme (UKCIP). These assume a high emissions scenario (worst case).

SUMMARY OF PROPOSED EIA SCOPE

Table 16.8 Summary of Energy and Climate Change impacts proposed to be scoped in and out of the EIA

Impacts	Scoped in or out?	Justification
Construction		
Effect of Proposed Development on climate change (construction stage GHG emissions)	In	Likely to have significant effects
Climate change resilience	In	Paragraph 4.39 of the NPSNN states that “applicants must consider the impacts of climate change when planning location, design, build and operation”

Impacts	Scoped in or out?	Justification
Operation		
Effect of Proposed Development on climate change (operational stage GHG emissions)	In	Likely to have significant effects
Climate change resilience	In	Likely to have significant effects

Chapter 17 ◆ Socio-Economics

INTRODUCTION

- 17.1 This chapter of the Scoping Report sets out the methodology to assess the potential socio-economic effects of the Proposed Development during the construction and operational phases.
- 17.2 Socio-Economic effects are proposed to be scoped into the Environmental Impact Assessment (EIA). The consideration of socio-economic conditions of the Environmental Statement (ES) will cover issues such as demographic changes and economic effects, which are generally considered to be medium and long term effects.
- 17.3 The ES Chapter will also consider the potential effects arising from the Proposed Development, accounting for what will be provided as part of the Intermodal Logistics Park North Rail Freight Interchange (ILPN RFI).
- 17.4 The following effects are therefore proposed to be scoped in the Socio-Economic Chapter:
- Impact on residents of the economic impact area who could work on the construction of the Proposed Development;
 - Impact on residents of the economic impact area, who could benefit from employment opportunities at the Proposed Development once operational;
 - Impact on local industrial and logistics businesses looking for floorspace in the Property Market Area;
 - Impact on the skills and training levels of the local labour force in the economic impact area;
 - Impact on demand for housing within the labour market area due to increased employment.
- 17.5 In line with the EIA Regulations, this Scoping Report chapter has been compiled by appropriately qualified, experienced, and competent experts. The authors of this chapter are Jonathan Adcock-Shepherd BSc MSc, a Senior Economist in Savills Economics. This chapter has been reviewed by Gabriel Baudard BCom MSc, Associate in Savills Economics, and approved by Mark Powney BSc MBA MRTPI (Director in Savills Economics with over 20 years of relevant UK experience). Mark Powney, Gabriel Baudard and Jonathan Adcock-Shepherd have wide-ranging experience in undertaking socioeconomics impact assessments of large scale Industrial & Logistics development proposals across the UK, including proposals that have undergone the DCO process such as the Hinckley National Rail Freight Interchange.

RELEVANT LAW, POLICY AND GUIDANCE

- 17.6 The DCO will be assessed against the Infrastructure Planning (Decisions) Regulations 2010 and National Networks National Policy Statement ('NPSNN', adopted 2024). The National Planning Policy Framework ('NPPF', 2023) and relevant local planning policy are material considerations.
- 17.7 In assessing the likely effects of the Proposed Development on socioeconomic receptors, the intention is to identify how and to what degree it would contribute to meeting economic priorities and addressing socioeconomic issues. The methodology for the assessment of potential effects on socioeconomic receptors takes into account the following legislation, policy and guidance. Relevant legislation, policy and guidance documents inform and provide insights into potential impact areas, economic priorities, socioeconomic challenges, baseline conditions, and methodological approach.

Legislative Context

- 17.8 There is no legislation specifically relevant to undertaking an assessment of Socio-Economic effects.

Planning Policy

- 17.9 There are a range of Planning Policy and evidence-base documents relevant to the undertaking of this Socio-Economic assessment at the national, regional, and district level. In particular.
- National Policy Statement for National Networks (2024), paragraphs 3.33, 3.58 to 3.93, and 5.243 to 5.251, on User Needs, Connectivity and economic growth, and Socio-economic impacts.
 - National Planning Policy Framework (NPPF) (2023);
 - National Planning Practice Guidance (PPG)
 - Liverpool City Region Strategic Housing and Employment Land Market Assessment (SHELMA) (March 2018)
 - Liverpool City Region LEP Delivery Plan 2021/22
 - Greater Manchester Strategy 2021-31
 - Greater Manchester Places for Everyone Joint Development Plan 2022-39 (Adopted March 2024)
 - St Helens Borough Local Plan up to 2037 (July 2022)
 - St Helens Inclusive Growth Strategy 2023-28
 - St Helens Employment Land Needs Study (October 2015)

- Wigan Local Plan Core Strategy (March 2024)Warrington Local Plan 2021/22-2038/39 (December 2023)
- Warrington Economic Development Needs Assessment (August 2021)

17.10 The relevant policy to be considered as part of the Socio-economic chapter includes but is not limited to the above documents.

Guidance and Best Practice

17.11 There are a range of additional guidance and best practice documents that will be considered as appropriate during the Socio-Economic assessment, including:

- Homes & Communities Agency (HCA, now Homes England) Employment Density Guide (2015, 3rd Edition)
- HCA Additionality Guide (2014, 4th Edition)
- Design Manual for Roads and Bridges, LA 112 Population and Human Health (2020, Revision 1)

CONSULTATION TO DATE

17.12 No contact with consultees has been made prior to the scoping submission.

17.13 It is anticipated that the Applicant will consult with a range of stakeholders including residents, businesses, and other properties; local authorities, interest groups, landowners, elected representatives, and prescribed organisations, some of which may provide comments related to Socioeconomics issues.

17.14 Consultation will likely be taking place with key relevant council members within St Helens, Wigan and Warrington and within local Parish Councils. Consultation could also take place with members of the Liverpool City Region Combined Authority and Greater Manchester Combined Authority if deemed relevant.

BASELINE CONDITIONS AND MAIN ISSUES

17.15 This section introduces the socioeconomic baseline conditions in St Helens Borough Council (SHBC), the Metropolitan Borough of Wigan (MBW), and Warrington Borough Council (WBC). Key socioeconomic indicators reviewed include population, economic activity, unemployment, qualification, occupations of employment, indices of deprivation, industry of employment, and population growth. Where relevant the key socioeconomic indicators reviewed are compared to the regional and national level for context.

Baseline environment

17.16 The DCO Site straddles SHBC and MBWC, and abuts WBC which have populations of 183,400, 329,800 and 211,200 respectively, based on the 2021 Census.

- 17.17 According to the ONS Annual Population Survey (APS), in the twelve months to March 2024, 76.0% of working-age people (people aged 16-64 years old) in SHBC, 70.6% in MBWC and 79.2% in WBC were economically active. Unemployment rates of working age people in SHBC (3.6%), MBWC (2.8%) and WBC (3.4%) were lower than the North West (4.6%) and England (4.0%).
- 17.18 The APS also indicates that both SHBC and MBWC have lower skills and qualification levels than the North West and England, with a higher share of working-age people with no qualification and a lower share of people with high skills levels, Regulated Qualification Framework (RQF 4+). This does not apply to WBC however, which has a higher share of working-age people with high skill levels and a lower share of people with no qualifications compared to the regional and national averages.
- 17.19 For SHBC, this skills and qualifications gap is not translated into the share of employment by occupations type. According to the March 2024 APS, SHBC has a higher share of residents in high-skills occupations (Standard Occupation Categories 1, 2 and 3) than the North West and England, and inversely a lower share of residents in low-skills occupations (Standard Occupation Categories 7, 8 and 9). MBW has a lower share of high skilled residents and a higher share of low skilled residents compared to the regional and national averages. WBC has both a higher share of high skilled residents and low skilled residents compared to the region and nation, with an occupation profile categorised by high level of medium-skilled residents.
- 17.20 Based on the 2019 Indices of Multiple Deprivation (IMD), SHBC, MBWC and WBC are ranked 40th, 97th and 175th respectively out of 317 Local Authority Districts, with 1 being the most deprived, which suggests very high levels of deprivation within SHBC and MBW. SHBC, MBWC and WBC perform similarly when considering income and employment deprivation.
- 17.21 As shown in Table 17.1, in SHBC, MBWC and WBC there are a high proportion of workers in the construction sector compared to the regional and national averages. SHBC and WBC have a higher proportion of workers in the transportation and storage sector compared to MBWC, the North West and England, while MBWC has a higher proportion of its residents working in the manufacturing sector compared to SHBC, WBC, the North West and England. WBC has a higher proportion of its workers employed in the professional, technical and scientific and admin and support services industries compared to SHBC, MBWC, the North West and England.

Table 17.1 Employment by Sector (%)

Sector	SHBC	MBWC	WBC	North West Region	England
Construction	5.9%	9.9%	WBC	5.2%	4.9%
Transportation	8.8%	4.5%	8.6%	4.7%	5.1%

and Storage					
Manufacturing	8.8%	10.8%	4.3%	8.8%	7.4%
Professional, Scientific and Technical	5.9%	5.4%	15.0%	9.4%	9.5%
Admin and Support Services	13.2%	9.0%	15.0%	8.2%	9.0%

Source: BRES 2022

17.22 As shown in Table 17.2, SHBC, MBWC and WBC are all well supplied with employees in the construction, transport and storage and manufacturing sectors.

Table 17.2 Employment by Sector (Number)

Sector	SHBC	MBWC	WBC
Construction	4,000	11,000	11,000
Transportation and Storage	6,000	5,000	12,000
Manufacturing	6,000	12,000	6,000

Source: BRES 2022

17.23 Between 2012 and 2021, the population growth in SHBC (4.1%), MBWC (3.5%) and WBC (3.7%) was slower than the North West (4.8%) and England (5.7%).

17.24 According to the ONS 2018-based population projections (2020), SHBC’s working age population (16-64) will grow by 0.3% between 2024 and 2034, whereas MBW’s and WBC’s working age populations will fall by 1.1% and 2.9% respectively. Over the same period, the working age populations in the North West and England are expected to grow by 0.2% and 0.9% respectively.

Proposed approach to surveys and further baseline data collection

17.25 The Socio-Economic chapter will assess the effects of the Proposed Development on the population, a receptor under the 2017 EIA Regulations. The following have been considered as potential receptors and will be discussed under the following headings:

- Impact on residents of the relevant impact area, who could work on the construction of the Proposed Development;
- Impact on residents of the relevant impact area, who could benefit from employment opportunities at the Proposed Development once operational;
- Impact on local industrial and logistics businesses looking for floorspace in the relevant impact area;
- Impact on the relevant impact area through an increase in economic activity and productivity as a result of the construction and operation of the Proposed Development;
- Impact on the skills and training levels of the local labour force in the relevant impact area.

17.26 The baseline will set out the characteristics of the local economy and workforce, such as economic activity, unemployment rates, skills and qualifications, and occupation profile. It will also assess the characteristics of the existing population e.g. age and levels of deprivation.

17.27 Where applicable, these factors will be considered for the existing population in comparison to the regional and national population.

17.28 Baseline information on the socio-economic conditions of the area will be collated from a variety of sources, including:

- Office for National Statistics 2021 Census Data;
- Datasets produced by the ONS, including but not limited to the Annual Population Survey, the Business Register and Employment Survey;
- Department for Business, Energy and Industrial Strategy;
- Oxford Economics Local Authority Employment Projections;
- Evidence-base from St Helens Borough Council, Wigan Metropolitan Borough Council and Warrington Borough Council;
- Where relevant the baseline will refer to other technical reports prepared as part of the DCO application, which may include the Industrial and Logistics Needs Assessment for the presentation of industrial and logistics property market data.

17.29 The outcome of the baseline conditions review will inform the definition of the sensitivity levels of the Socio-Economic receptors assessed in the chapter.

APPROACH AND METHODOLOGY

17.30 The assessment of socio-economic effects will follow the General Assessment Methodology presented in Chapter 4: Approach to the Assessment of the Scoping Report. The definitions of receptor sensitivity, impact magnitude and effect significance in Chapter 4 are anticipated to be in line with those to be used in the assessment of socio-economic effects. Receptor sensitivity and impact magnitude in the context of socioeconomic issues are further defined in the following tables:

Table 17.3 Receptor Sensitivity Assessment

Receptor value / sensitivity	Receptor type
High	Strong evidence of direct and significant socio-economic challenges relating to receptor. Accorded a high priority in local, regional or national economic and regeneration policy.
Medium	Some evidence of socio-economic challenges linked to receptor, which may be indirect. Change relating to receptor has medium priority in local and regional economic and regeneration policy.
Low	Little evidence of socio-economic challenges relating to receptor. Receptor is accorded a low priority in local economic and regeneration policy.
Negligible	Very little or no evidence of socio-economic challenges relating to receptor. Receptor is not a priority in local, regional and national economic and regeneration policy.

Table 17.4 Impact Magnitude Definition

Magnitude	Evidence for magnitude assessment
High	The impact will result in significant changes to baseline conditions, or will be highly likely to affect large numbers of people and/or businesses over the long term. It is considered to be an important consideration, and likely to be material in the decision-making process.

Magnitude	Evidence for magnitude assessment
Medium	The impact will result in some changes to baseline conditions, and is likely to affect a moderate number of people and/or businesses over a medium duration. The change may be important, but may be a key decision-making factor.
Low	The impact will result in a perceptible difference from baseline conditions, and is likely to affect to a small number of people and/or businesses over a short duration. The impact is unlikely to be critical in decision-making process.
Negligible / No Change	The impact does not result in variation beyond baseline conditions and is unlikely to measurably affect people and/or businesses.

- 17.31 Quantitative assessment will be used where possible and significance criteria will be produced to ensure that there is a consistent identification of effects applied during the assessment. Due to the complexity of socio-economic issues and the numerous interactions that can occur, it is not possible to predict the precise nature or scale of each impact. Qualitative assessment will therefore also be used where necessary.
- 17.32 The level of significance of an effect will be determined through professional judgement of factors such as the scale or sensitivity of the receptor group and the magnitude of the impact (the amount of change). The level of significance is also determined with reference to planning policy, best practice guidance and relevant contextual factors. The assessment of significance will be consistent with the Generic Assessment Framework in Chapter 4.
- 17.33 Effects that are moderate or greater in significance are considered to be significant in EIA terms for socio-economics.
- 17.34 The assessment of likely significant effects will be undertaken using the following methodology and/or tools:
- An analysis of the current state of the local, wider area and regional economy including economic activity, unemployment, labour productivity (in terms of Gross Value Added (GVA) per worker), skills and occupation profile of residents and the labour force, to define receptor sensitivity;
 - An assessment of the employment potential of the Proposed Development during the construction and operational phases, following best practice guidance and applying assumptions to account for leakage, displacement and multiplier effects, to define impact magnitude;

- The employment potential of the construction of the Proposed Development will be derived from construction costs and average turnover per worker in the region;
- The employment potential of the operation of the Proposed Development will be derived from employment densities for the relevant land uses, accounting for relevant guidance, research and evidence base;
- An assessment of the likely skills and occupation profiles required for the operation of the Proposed Development, based on standard profile in the Industrial & Logistics sector, and its availability within the labour force, to define impact magnitude;
- An assessment of the economic output potential of the Proposed Development, measured in terms of GVA, resulting from the construction and operational employment generated, drawing from data on average labour productivity (GVA per worker), to define impact magnitude;
- A review of key supply and demand indicators in the Industrial & Logistics Property Market Area, using data from other consultant reports, to define impact magnitude;
- An assessment of the potential increase in local authority revenues from additional Business Rates Income (BRI) generated by the employment floorspace delivered by Proposed Development and retained locally, to define impact magnitude.

Geographical Scope

- 17.35 The concept of an impact area is standard in EIA practice, however, there is no standard measure. For socio-economic impact assessments, this is further complicated by the mobility and network of potential receptors.
- 17.36 The geographical scope has yet to be confirmed but will be determined with reference to the insights and analysis of other consultants' technical reports, including the transport assessment and property market assessments. A draft economic impact area, which will be kept under review, includes the 13 Local Authorities (Wigan, St. Helens, Warrington, Halton, Knowsley, Liverpool, West Lancashire, Chorley, Bolton, Bury, Salford, Trafford and Manchester).
- 17.37 The process to defining appropriate impact areas will account for planning policy and guidance, labour and skills pool, local authority boundaries, travel to work time, and travel to work distance.
- 17.38 As a result of this approach, it may be that multiple impact areas will be defined depending on the receptor considered. In this instance, the definition of multiple impact areas will be clearly justified and the approach taken to define those areas will be explained. The assessment of socioeconomic effects may for instance be undertaken in reference to the following types of socioeconomic impact area:
- A labour market area, which would account for the existing location of jobs and of the

labour force;

- A Property Market Area (PMA), which is defined as the broad ‘area of search’ the DCO Site sits within, that prospective I&L occupiers will consider when looking to lease space. Effectively, the PMA includes the competitor locations to the DCO Site for attracting occupier demand. This is the geography within which market supply and demand factors will be considered.

17.39 The geographical scope is likely anticipated to include, at a minimum, the local authority boundaries of St Helens Borough Council, the Metropolitan Borough of Wigan, and Warrington Borough Council.

Temporal Scope

17.40 Potential impacts and effects upon socio-economic receptors will be assessed in relation to temporary and permanent impacts. As a general rule, temporary impacts relate to the construction phase of development and permanent impacts relate to the occupation/operational phase. The temporal scope includes:

- Short term – Temporary effects related to a specific construction event of no more than a year’s duration – such as the construction of an individual building or a specific element of infrastructure such as a section of road.
- Medium term – Temporary effects of longer duration, such as those arising over an extended period of construction ranging from one year to the full construction period, envisaged to be ten years.
- Long term – Permanent effects arising from the operation of the SRFI or from the permanent presence or removal of physical features.

17.41 Unless otherwise stated, the assessment of permanent and long term effects will assume that the Proposed Development is fully complete and operational.

PRELIMINARY ASSESSMENT OF POTENTIAL EFFECTS

Construction Impacts and Effects

17.42 Construction of the Proposed Development would take place over the construction phase and would support the employment on-site of a range of trades and professions in the construction industry in the economic impact area. It would also have an off-site indirect economic effect through the sourcing of building materials, services and suppliers, which will further support the creation of jobs off-site in the economic impact area.

17.43 The construction of the Proposed Development will generate substantial economic output for the local economy in the short to medium term, measured in Gross Value Added and derived from average labour productivity (GVA per job).

17.44 It is anticipated that any temporary disruption caused to local businesses, employment uses and workers off-site during the construction phase will be mitigated through the

implementation of the Construction Environmental Management Plan (CEMP) and Construction Traffic Management Plan (CTMP). These disruptions are therefore scoped out of the EIA.

- 17.45 It is expected that construction jobs generated by the Proposed Development will be in majority taken by residents of the relevant impact area, and that any other workers involved in the construction phase that reside outside of the impact area will commute rather than relocate locally with their families. As a result the impact on local social infrastructure and facilities is scoped out of the assessment.

Occupation Impacts and Effects

- 17.46 The Proposed Development's operational effects will arise from the proposed new floorspace and employment from SRFI activities. The Proposed Development will enable businesses in the Industrial and Logistics sector to take-up floorspace within the economic impact area.
- 17.47 The proposed new floorspace will create direct on-site employment opportunities for residents of the economic impact area. It would also have an indirect economic effect through the sourcing of services and through supply chain effects, which will further support the creation of jobs off-site in the economic impact area.
- 17.48 The new employment opportunities created in the Industrial & Logistics sector will draw workers from a range of skill levels and with a variety of occupational profiles. The availability of workers with the right skillset and occupational profiles in the Property Market Area (PMA) will be assessed, which may identify opportunities for up-skilling.
- 17.49 The operation of the Proposed Development will generate substantial economic output for the local economy, measured in Gross Value Added and derived from average labour productivity (GVA per job).
- 17.50 The new proposed employment floorspace will also be liable to pay Business Rates, which has the potential to generate substantial new public sector revenues.

PROPOSED AVOIDANCE AND MITIGATION MEASURES

- 17.51 As outlined in above, it is assumed that a comprehensive CEMP and CTMP will be in place to mitigate any potential disruption to local businesses, employment uses and workers during the construction phase.
- 17.52 An additional mitigation measure or enhancement action that may be proposed would be the preparation and implementation of an Employment and Skills Plan, to assist with the training and up-skilling of the workforce during the construction phase. This would aim to ensure the local workforce and local population benefit from opportunities in the construction and operational phases, including residents suffering from deprivation or economically inactive residents that could regain work as a result. Opportunities for the preparation and implementation of an ESP will be further explored.

UNCERTAINTIES

- 17.53 Due to the nature of the assessment, estimation of employment and Gross Value Added (GVA) benefits is subject to a range of uncertainties. Estimates are based on good practice principles, established guidance and official datasets. There will though remain a degree of uncertainty around our estimates. It is estimated that actual quantified impacts will likely be within a range, with upper and lower bounds, to reflect any potential margins of error.
- 17.54 Many figures are given based on current rates and values and could be significantly higher in real terms given the long timescale before completion and anticipated growth in the economy.
- 17.55 It is assumed that those limitations and uncertainties above would not compromise the outcomes of the assessment.

SUMMARY OF PROPOSED EIA SCOPE

17.56 The following table summarises the proposed scope of the assessment to be reported in the Socio-economic chapter of the ES.

Table 17.5 Summary of Socio-economic impacts proposed to be scoped in and out of the EIA

Impacts	Scoped in or out?	Justification
Construction		
Impact on residents who could work on the construction of the Proposed Development	In	Given the likely scale of the construction of the Proposed Development, this has the potential to generate significant employment opportunities during the construction phase and to support the construction sector.
Impact on economic output as a result of temporary construction activity	In	Given the likely scale of the construction of the Proposed Development, this has the potential to generate significant economic output for the economy.
Temporary disruption caused to local businesses and employment uses	In	Temporary disruption caused to local businesses and employment

Impacts	Scoped in or out?	Justification
		uses during the construction phase will be mitigated through the implementation of the CEMP and CTMP. These disruptions are scoped out of the EIA.
Impact on local social infrastructure as a result of a increase in on-site jobs	Out	It is expected that construction jobs generated by the Proposed Development will be taken by residents of the relevant impact area, and that any workers involved in the construction phase residing outside of the impact area will commute rather than relocate locally with their families. As a result the impact on local social infrastructure and facilities is scoped out of the assessment.
Impact on demand for housing within the labour market area due to increased operational employment	In	Given the scale of the construction employment associated with the Proposed Development, the uplift in workers will impact the demand for local housing.
Impact on land use and accessibility (including private property and housing, development land, community land and assets, businesses, agricultural land holdings; walkers, cyclists and horse-riders)	In	It is anticipated that land use and accessibility will be impacted during the construction phase.
Operation		
Impact on residents who could benefit from employment opportunities at the Proposed Development once operational	In	Due to significant quantum of floorspace delivered by the Proposed Development, this has the potential to generate

Impacts	Scoped in or out?	Justification
		significant employment opportunities in the operational phase for unemployed residents and workers employed in the Industrial & Logistics sector.
Impact on local industrial and logistics businesses	In	Due to the size and scale of the Proposed Development, impact on industrial and logistics across the PMA is likely, therefore this impact is scoped into the EIA.
Impact on the skills and training levels of the local labour force	In	Given the range of skill-levels and occupation profiles required by the Industrial & Logistics sector, the significant job creation enabled by the Proposed Development may provide employment opportunities for workers with a range of skills and occupational levels, while also providing opportunities for up-skilling and training.
Impact on economic output as a result of permanent operations	In	Given the likely scale of the operations of the Proposed Development, this has the potential to generate significant economic output for the economy.
Impact on Local Authority Revenues	In	Given the scale of the proposed employment floorspace, this has the potential to generate a significant uplift in Business Rates income for the Local Authorities.
Impact on demand for housing within the labour market area due to increased operational	In	Given the scale of the operational employment associated with the Proposed Development, the

Impacts	Scoped in or out?	Justification
employment		uplift in workers will impact the demand for local housing.

Chapter 18 ◆ Population and Human Health

INTRODUCTION

- 18.1 This chapter will identify the potential population and health impacts associated with construction and operation of the Proposed Development. The proportionality of the assessment, and further detail on what specific health determinants are proposed to be assessed are outlined in the following sections. This has been guided by the Institute of Environmental Management and Assessment (IEMA) Guide to Effective Scoping of Human Health in EIA.
- 18.2 In line with the EIA Regulations, this Scoping Report has been compiled by appropriately qualified, experienced, and competent experts. The author of this chapter is Tara Barratt (BSc Hons, MSc (DIC), AIEMA), a technical expert in environmental epidemiology with over 8 years' experience. This chapter has been reviewed and approved by Dr Andrew Buroni, who holds a PhD in Health Impact Assessment methods and best practice, and has over 25 years' experience. Both are acknowledged as co-authors of the recently published guidance on 'effective scoping for human health in EIA' and 'determining significance for human health in EIA'.

RELEVANT LAW, POLICY AND GUIDANCE

- 18.3 The DCO will be assessed against the Infrastructure Planning (Decisions) Regulations 2010 and National Networks National Policy Statement ('NPSNN', adopted 2024). The National Planning Policy Framework ('NPPF', 2023) and relevant local planning policy are material considerations.

National Planning Policy

Introduction

- 18.4 This section presents any law, policy and guidance relevant to the assessment of population and health. While a wide range of environmental, social and economic factors have the potential to influence population and health, to ensure a focused list, the law, policy and guidance referenced in this section have been included only if they explicitly relate to health and/or wellbeing.
- 18.5 The law, policy and guidance referenced in this section will be applied to inform the process, scope, focus and methodology of the population and health assessment.

National Policy Statement for National Networks (NPSNN)

- 18.6 Health is a key theme of the National Policy Statement for National Networks (NPSNN),

whereby paragraph 4.71 states that new or enhanced national network infrastructure may have direct impacts on health because of traffic, noise, vibration, air quality and emissions, light pollution, community severance, dust, odour, polluting water, hazardous waste and pests. They may also have indirect health impacts: for example, if they affect access to key public services, local transport, opportunities for walking, cycling and wheeling, or the use of open space for recreation and physical activity.

- 18.7 Paragraph 4.72 states that effects on human beings should be assessed, identifying any potential adverse health impacts, and identify measures to avoid, mitigate or as a last resort compensate for adverse health impacts as appropriate. Enhancement opportunities are also mentioned, and should be identified by promoting local improvements for active travel and horse riders driven by the principles of good design to create safe and attractive routes to encourage health and wellbeing; this includes potential impacts on vulnerable groups within society.

National Planning Policy Framework

- 18.8 Promoting healthy and safe communities is a central theme of the National Planning Policy Framework (NPPF) (Ministry of Housing, Communities and Local Government, 2023), whereby the NPPF states that planning policies and decisions should aim to achieve healthy, inclusive and safe places and beautiful buildings which promote social interaction (including opportunities for meetings between people who might not otherwise come into contact with each other), are safe and accessible, and enable and support healthy lifestyles (paragraph 96).
- 18.9 Furthermore, the NPPF (paragraph 97) states that to provide the social, recreational and cultural facilities and services that communities need, planning policies and decisions should:
- Plan positively for the provision and use of shared spaces, community facilities and other local services;
 - Take into account and support the delivery of local strategies to improve health, social and cultural wellbeing;
 - Guard against the unnecessary loss of valued facilities and services;
 - Ensure that established shops, facilities and services are able to develop and modernise, and are retained for the benefit of the community; and
 - Ensure an integrated approach to considering the location of housing, economic uses and community facilities and services.

Local Planning Policy

St Helens Borough Local Plan (July 2022)

- 18.10 Policy LPA02 (Development Principles) states that new development in St Helens Borough will be required to (amongst other factors): contribute to the reduction of socio-economic inequality including health inequalities within St Helens Borough, and between the Borough and other parts of the UK; and promote healthy communities by improving access and

opportunities for formal and informal recreation (including through the use of green infrastructure), improving cycling and walking routes, and minimising air, soil, and water pollution.

- 18.11 Policy LPA08 (Green Infrastructure) states that the green infrastructure network in St Helens Borough is capable of delivering a wide range of environmental and quality of life benefits for local communities, and the Council will work with other organisations where necessary to (amongst other factors) increase the accessibility of open space within walking distance of housing, health, employment and education establishments to promote healthy lifestyles.
- 18.12 Policy LPA12 (Health and Wellbeing) states that the Council will work with its health and wellbeing partners to promote public health principles, maximise opportunities for people to lead healthy and active lifestyles, and reduce health inequalities for residents within the Borough. Of specific relevance to the Proposed Development, the Council will:
- encourage improved access to a choice of homes and jobs that meet the needs of the area;
 - encourage people to be physically active by providing opportunities for walking, cycling, outdoor recreation and sport; and
 - manage air quality and pollution.
- 18.13 Policy LPD09 (Air Quality) states that development proposals must demonstrate that they will not (amongst other factors) lead to a significant deterioration in local air quality resulting in unacceptable effects on human health and local amenity.

Wigan Local Plan (September 2013)

- 18.14 A strategic objective of the Wigan Local Plan relates to health and recreation, whereby Objective HR 1 is to improve health and life expectancy, particularly in the most deprived neighbourhoods, by enhancing opportunities for walking and cycling as part of everyday life; providing more opportunities for people to participate in sport and physical recreation and cultural activities; and improving the environment where people live, and to improve accessibility to quality health care.

Wigan – Places for Everyone Joint Development Plan Document (March 2024)

- 18.15 Policy JP-G2 (Green Infrastructure Network) states that a strategic approach will be taken to the protection, management and enhancement of our Green Infrastructure in order to protect and enhance the ecosystem services which the Green Infrastructure Network provides, including flood management, climate change mitigation and adaptation. Alongside this primary function an enhanced Green Infrastructure network will support wider public health benefits, including promotion of active travel, food growing and recreational opportunities.
- 18.16 Policy JP-G7 (Trees and Woodland) refers to the aim to significantly increase tree cover, protect and enhance woodland, and connect people to the trees and woodland around them.

Amongst many factors, this will be done by improving public access to woodland and trees particularly by sustainable travel models to capture the health and wellbeing benefits whilst managing the associated pressures.

18.17 Policy JP-P6 (Health) states that to help tackle health inequality new development will be required, as far as practicable, to:

- Maximise its positive contribution to health and wellbeing, whilst avoiding any potential negative impacts of new development;
- Support healthy lifestyles, including through the use of active design principles making physical activity an easy, practical and attractive choice; and
- Be supported by a Health Impact Assessment for all developments which require to be screened for an Environmental Impact Assessment, and other proposals which, due to their location, nature or proximity to sensitive receptors, are likely to have a notable impact on health and wellbeing.

18.18 Policy JP-C1 (An Integrated Network) states that in order to help deliver an accessible, low carbon Greater Manchester with world-class connectivity, a range of measures will be supported, including (amongst other factors) transforming transport infrastructure and services by securing investment in new and improved transport infrastructure and services that will meet customers' needs by being integrated, reliable, resilient, safe and secure, well-maintained, environmentally responsible, attractive and healthy.

Warrington Local Plan (December 2023)

18.19 Policy INF1 (Sustainable Travel and Transport) states that the Council will expect development to (amongst other factors) improve walking and cycling facilities (active travel) including, increase accessibility for all members' of society through improvements and the provision of new infrastructure to make the most of potential environmental, social and health benefits.

18.20 Policy DC3 (Green Infrastructure) states that the Council, in partnership with other agencies and stakeholders will adopt a strategic approach to the care and management of all the Borough's green infrastructure and seek to protect, enhance and extend the multifunctional network in order to maintain and develop the wider public health, active travel, flood management, climate change, ecological and economic benefits it provides.

18.21 Policy DC6 (Quality of Place) states that good design should be at the core of all development proposals having regard to a range of principles, including "movement and accessibility", which states that places should be designed to meet the principles of active travel and promote a healthy active lifestyle.

18.22 Policy ENV8 (Environmental and Amenity Protection) states that the Council requires that all development is located and designed so as not to result in a harmful or cumulative impact on the natural and built environment, and/or general levels of amenity. There are specific references to health under the following topics: air quality, land quality and noise.

Guidance

18.23 The following guidance is proposed to be followed for the assessment of population and human health:

- National Planning Practice Guidance;
- IEMA Guide to Effective Scoping of Human Health in EIA; and
- IEMA Guide to Determining Significance of Human Health in EIA.

18.24 The National Planning Practice Guidance (NPPG) (Ministry of Housing, Communities & Local Government, 2019) supports the NPPF and provides guidance across a range of topic areas. As stated in the NPPG, planning and health need to be considered firstly in terms of creating environments that support and encourage healthy lifestyles, and secondly in terms of healthcare capacity. In addition, engagement with individuals and/or organisations, such as the relevant Director(s) of Public Health, will help ensure local public health strategies and any inequalities are considered appropriately.

18.25 The IEMA guidance on ‘Effective Scoping of Human Health in EIA’ (IEMA, 2022) defines the approach for scoping wider determinants of health in or out of an EIA and is derived from EU EIA Directive 2014/52/EU.

18.26 Furthermore, the IEMA guidance on ‘Determining Significance for Human Health in EIA’ (IEMA, 2022) responds to gaps and inconsistencies across existing guidance as to how health, particularly regarding significance (including sensitivity and magnitude classifications), is assessed in EIA. This promotes greater consistency in the assessment process; particularly in how EIA health conclusions are reached, interpreted, defended and applied to the greatest positive effect.

CONSULTATION TO DATE

18.27 Consultation with respect to population and human health has not been undertaken prior to submission of this EIA Scoping Report. It is not proposed to undertake any population and health-specific consultation outside of the main EIA process.

BASELINE CONDITIONS AND MAIN ISSUES

Baseline environment

18.28 As baseline data is limited to administrative boundaries, the collection of health data (relevant to environmental health determinants) focusses upon all administrative areas that fall within 500m of the Proposed Development. This comprises: Newton-le-Willows East ward; Lowton East ward; Burtonwood & Winwick ward; and Culcheth, Glazebury & Croft ward.



18.29 Table 18.1 outlines existing local health circumstance in ward where the Proposed Development is located/adjacent to (Newton-le-Willows East ward; Lowton East ward; Burtonwood & Winwick ward; and Culcheth, Glazebury & Croft ward), using the district study

area (St. Helens, Wigan and Warrington), regional (North West) and national (England) averages as relevant comparators.

18.30 As shown, the local health circumstance in the ward study area is worse than the national average for the majority of health indicators analysed. Exceptions to this include: life expectancy for males; emergency hospital admissions for chronic obstructive pulmonary disease (COPD); incidence of all cancer; hospital admissions for alcohol attributable conditions; and deaths from causes considered preventable (under 75 years).

Table 18.1 Local health circumstance summary

Indicator	Ward study area	District study area	North West	England
Life expectancy for males (years)	79.6	78.0	n/a	79.5
Life expectancy for females (years)	82.1	81.5	n/a	83.2
Emergency hospital admissions for all causes (standardised admission ratio (SAR))	111	119.1	116.9	100
Emergency hospital admissions for coronary heart disease (SAR)	108.1	121.2	125	100
Emergency hospital admissions for stroke (SAR)	108.8	117	109.8	100
Emergency hospital admissions for myocardial infarction (SAR)	107.5	119.4	115	100
Emergency hospital admissions for chronic obstructive pulmonary disease (SAR)	90	106.3	128.7	100
Incidence of all cancer (standardised incidence ratio (SIR))	98.4	102.4	103.6	100
Emergency hospital admissions for intentional self harm (SAR)	161.5	188.9	126.6	100

Indicator	Ward study area	District study area	North West	England
Hospital admissions for alcohol attributable conditions (narrow definition)	97.2	117.8	112.5	100
Deaths from all causes, all ages (standardised mortality ratio (SMR))	110.2	116.5	111.9	100
Deaths from all cancer, all ages (SMR)	100.6	106.4	107.5	100
Deaths from circulatory disease, all ages (SMR)	108	113.5	108.9	100
Deaths from coronary heart disease, all ages (SMR)	114.6	116.3	117.7	100
Deaths from stroke, all ages (SMR)	115.4	112.3	n/a	100
Deaths from respiratory diseases, all ages (SMR)	127.9	135.8	122.7	100
Deaths from causes considered preventable, under 75 years (SMR)	95.8	120.4	125.1	100
Key:				
	Better than the national average			
	Worse than the national average			

Proposed approach to surveys and further baseline data collection

- 18.31 Different communities have varying circumstance and sensitivity to changes in environmental and socio-economic determinants of health (both adverse and beneficial) as a result of social and demographic structure, behaviour and relative economic circumstances. As such, one key purpose of baseline data collection for the population and health topic is to establish the existing local burden of poor health and associated sensitivity to changes in the environmental and socio-economic environment.
- 18.32 Environmental health determinants (such as changes to air quality and noise exposure) typically have a local distribution pattern, where the hazards are limited by their concentration and physical dispersion characteristics. Likewise, changes in transport nature and flow rate have a particular distribution on the local road network. Socio-economic health determinants (such as employment and related income generation) have a wider geographic scope of influence than environmental health determinants due to the willingness to commute significant distances to work.
- 18.33 As previously stated, as baseline data is limited to administrative boundaries, the collection of health data (relevant to environmental health determinants) focusses upon all administrative areas that fall within 500m of the Proposed Development. This comprises: Newton-le-Willows East ward; Lowton East ward; Burtonwood & Winwick ward; and Culcheth, Glazebury & Croft ward. Any socio-economic baseline data presented will remain consistent with the study area outlined in Chapter 17: Socio-economics.
- 18.34 Building upon the information provided in this scoping chapter, a desktop study will be undertaken to establish the local population and health circumstance for the ES. This will involve the collection and interpretation of third-party data, contrasted against regional and national comparators. The following open-source websites and datasets are anticipated to be used to develop the population and human health baseline:
- Office for Health Improvement and Disparities (OHID) Local Health tool;
 - OHID Fingertips tool;
 - NOMIS; and
 - Office for National Statistics (ONS).
- 18.35 It should be noted that where trend data is not readily available at the ward level, data would be collected for St. Helens, Wigan and Warrington district level areas, which is considered to be appropriately representative of the communities living around the Proposed Development.

APPROACH AND METHODOLOGY

Proposed study area (geographic scope)

18.36 There are two elements to the population and human health study area:

- the study area for baseline data collection in order to establish the existing local burden of poor health and associated sensitivity to changes in the environmental and socio-economic environment (described in the section above); and
- the study area for receptors assessed, and the associated environmental and socio-economic changes at these receptors.

18.37 The study area defining the relevant sensitive receptors identified for assessment purposes is proposed to remain consistent with the inter-related technical aspects which inform the assessment of population and human health.

Proposed temporal scope

18.38 The chapter will assess potential effects across a range of health determinants during both the construction and operational phases of the Proposed Development.

Receptor sensitivity

18.39 Within a defined population, individuals will range in level of sensitivity due to a series of factors such as age, socio-economic deprivation and the prevalence of any pre-existing health conditions which could become exacerbated. These individuals can be considered particularly vulnerable to changes in environmental and socio-economic factors (both adversely and beneficially), whereby they could experience disproportionate effects when compared to the general population.

18.40 As an example, the elderly, young children and individuals with chronic pre-existing respiratory conditions would be more sensitive to adverse changes to air quality, with the potential for emergency admission to hospital more likely than for someone of working age who has good respiratory health. On the other hand, an individual who has been unemployed for a long period of time would benefit more from employment opportunities generated by the Proposed Development in comparison to an individual who is already employed.

18.41 The health sensitivity methodology criteria shown in Table 18.2 are proposed to be used to inform the assessment of significance.

Table 18.2 Sensitivity of receptor criteria

Category/level	Indicative criteria
High	High levels of deprivation (including pockets of deprivation); reliance on resources shared (between the population and the project); existing wide

Category/level	Indicative criteria
	inequalities between the most and least healthy; a community whose outlook is predominantly anxiety or concern; people who are prevented from undertaking daily activities; dependants; people with very poor health status; and/or people with a very low capacity to adapt.
Medium	Moderate levels of deprivation; few alternatives to shared resources; existing widening inequalities between the most and least healthy; a community whose outlook is predominantly uncertainty with some concern; people who are highly limited from undertaking daily activities; people providing or requiring a lot of care; people with poor health status; and/or people with a limited capacity to adapt.
Low	Low levels of deprivation; many alternatives to shared resources; existing narrowing inequalities between the most and least healthy; a community whose outlook is predominantly ambivalence with some concern; people who are slightly limited from undertaking daily activities; people providing or requiring some care; people with fair health status; and/or people with a high capacity to adapt.
Very low	Very low levels of deprivation; no shared resources; existing narrow inequalities between the most and least healthy; a community whose outlook is predominantly support with some concern; people who are not limited from undertaking daily activities; people who are independent (not a carer or dependant); people with good health status; and/or people with a very high capacity to adapt.

Source: IEMA Guide to Determining Significance for Human Health in EIA (IEMA, 2022)

Magnitude of impact

18.42 The health magnitude methodology criteria shown in Table 18.3 are proposed to be used to inform the assessment of significance.

Table 18.3 Magnitude of impact criteria

Category/level	Indicative criteria
High	High exposure or scale; long-term duration; continuous frequency; severity predominantly related to mortality or changes in morbidity (physical or mental health) for very severe illness/injury outcomes; majority of population affected; permanent change; substantial service quality implications.
Medium	Low exposure or medium scale; medium-term duration; frequent events; severity predominantly related to moderate changes in morbidity or major change in quality-of-life; large minority of population affected; gradual reversal; small service quality implications.
Low	Very low exposure or small scale; short-term duration; occasional events; severity predominantly related to minor change in morbidity or moderate change in quality-of-life; small minority of population affected; rapid reversal; slight service quality implications
Negligible	Negligible exposure or scale; very short-term duration; one-off frequency; severity predominantly relates to a minor change in quality-of-life; very few people affected; immediate reversal once activity complete; no service quality implication.

Source: IEMA Guide to Determining Significance for Human Health in EIA (IEMA, 2022)

Significance of effect

- 18.43 The significance of an effect is determined based on the sensitivity of a receptor and the magnitude of impact. The method employed for this assessment is presented in Table 18.4.
- 18.44 In all cases, the evaluation of receptor sensitivity, impact magnitude and significance of effect will be informed by professional judgement and will be underpinned by narrative to explain and justify the conclusions reached. Where a range of significance levels are presented, the final assessment for each effect will be based upon expert judgement.

Table 18.4 Level of effect

Magnitude	Sensitivity			
	High	Medium	Low	Very low
High	Major	Major/moderate	Moderate/minor	Minor/negligible
Medium	Major/moderate	Moderate	Minor	Minor/negligible
Low	Moderate/minor	Minor	Minor	Negligible
Negligible	Minor/negligible	Minor/negligible	Negligible	Negligible

PRELIMINARY ASSESSMENT OF POTENTIAL EFFECTS

18.45 Table 18.5, overleaf, outlines all determinants of health outlined in IEMAs Guide to Effective Scoping of Human Health in EIA, providing the justification for all matters to be scoped in and out of the construction and operation of the Proposed Development.

Table 18.5 Matters to be scoped in and out (construction and operation)

Category	Determinant of health	Justification (construction)	Justification (operation)
Health related behaviours	Physical activity	<p>Scoped in – while the Proposed Development would primarily be built on agricultural land, which is not publicly accessible, some public rights of way (PRoW) would be affected. The impacts and mitigation associated with this (to maintain access across and into the DCO Site) would be included in the population and human health chapter.</p>	<p>Scoped in – potential avoidance/mitigation measures include pedestrian/cycle infrastructure upgrades and PRoW provision. The potential permanent population and health effects associated with this would be scoped in. However, depending on the phasing of infrastructure, this may be captured in the construction phase assessment as ‘permanent construction impacts’.</p>
	Risk taking behaviour (i.e. use of alcohol, cigarettes, non-prescribed drugs, problem gambling and communicable illness including STIs / other infections)	<p>Scoped in – risk taking behaviour during construction is generally associated with a large non-home based workforce who temporarily relocate to the area surrounding the DCO Site and may contribute to a change in the social/cultural environment locally, which includes risk taking behaviour.</p> <p>Given the scale of the construction employment, there is potential for a large non-home-based workforce. Therefore the impacts on risk taking behaviour will be assessed accordingly.</p>	<p>Scoped out – the Proposed Development is for an SRFI whereby anyone on-site would be part of the workforce who would commute to/from the DCO Site on a daily basis. As the workforce would remain on-site during the day, there is limited potential for external impacts on risk taking behaviour.</p>

Category	Determinant of health	Justification (construction)	Justification (operation)
	Diet and nutrition	Scoped out – while the Proposed Development results in the loss of agricultural land, this would not have a material impact on access to food, diet or nutrition during construction or operation.	
Social environment	Housing	Scoped out – due to the scale of construction and operational employment, the impact on local housing will be assessed as part of Chapter 17: Socio-economic. The resultant effects of this (for example on healthcare demand) will be assessed within the population and health chapter accordingly.	
	Relocation	Scoped out – there are a small number of individual residential dwellings / farmsteads on-site that would be demolished. The loss and relocation of individual dwellings would be dealt with as part of the DCO, and is not of a level to have a population level impact.	
	Open space, leisure and play	Scoped in – the Proposed Development would be built on land which is primarily agricultural in nature and is not publicly accessible and so will not impact existing access to open space. However, some PRow would be affected; the impacts and mitigation associated with this would be included in the population and human health chapter.	Scoped in – potential avoidance/ mitigation measures include pedestrian/cycle infrastructure upgrades and PRow provision. The potential permanent population and health effects associated with this would be scoped in. However, depending on the phasing of infrastructure, this may be captured in the construction phase assessment as ‘permanent construction impacts’.
	Transport modes, access and	Scoped in – the Proposed Development would generate changes in transport nature	Scoped in – the purpose of the Proposed Development is to primarily transfer

Category	Determinant of health	Justification (construction)	Justification (operation)
	connections	<p>and flow rate on existing transport infrastructure (associated with the delivery of construction materials and worker travel to/from the DCO Site).</p> <p>The population and health effects associated with changes in transport and access during the construction phase would be scoped into the ES to more effectively communicate the themes most relevant to health and wellbeing (i.e. severance, pedestrian and cyclist amenity, fear and intimidation and risk of road traffic accidents/injury).</p> <p>The population and health topic would draw from and build upon key outputs from the Chapter 6: Transport in order to carry out the assessment and reach a conclusion regarding the significance of effect in population and health terms.</p>	<p>freight movements from road to rail via the SRFI facility, with an overall net reduction in transport movements. However, acknowledging that some of the warehousing proposed for the SRFI will serve a road-borne purpose, the Proposed Development will result in a change in transport movements and nature locally.</p> <p>The population and health effects associated with changes in transport and access during the operation phase would be scoped into the ES to more effectively communicate the themes most relevant to health and wellbeing (i.e. severance, pedestrian and cyclist amenity, fear and intimidation and risk of road traffic accidents/injury).</p> <p>The population and health topic would draw from and build upon key outputs from the Chapter 6: Transport in order to carry out the assessment and reach a conclusion regarding the significance of effect in population and health terms.</p>

Category	Determinant of health	Justification (construction)	Justification (operation)
	Community safety (e.g. crime and injury risk)	Scoped out – the DCO Site during the construction phase would be secure, and subject to security measures to deter the potential for anti-social behaviour and/or crime. In addition, any contractors hired would be subject to the Considerate Contractors Scheme to reduce any impacts on the local community, while the safety of construction workers themselves would be ensured through relevant measures required under the Health and Safety at Work Act.	Scoped out – once operational, the DCO Site would be sufficiently secure to deter trespassing, anti-social behaviour and crime. Furthermore, the safety of operational workers would be ensured through relevant measures required under the Health and Safety at Work Act. Where relevant, such matters would be addressed within the Project Description and Major Accidents and Disasters.
	Community identity, culture, resilience and influence	Scoped in – construction of the Proposed Development may impact the visual environment (including due to night lighting). Such changes may influence local pride and wellbeing, and how local communities sense control over their living environment.	Scoped in – operation of the Proposed Development may impact the visual environment (including due to night lighting). Such changes may influence local pride and wellbeing, and how local communities sense control over their living environment.
	Social participation, interaction and support	Scoped in – the Main Site includes Kenyon Hall Airfield which is a small airfield used by the Lancashire Aero Club for recreational flying of small propeller planes. In addition, Warrington Model Flying Club use the land for flying radio controlled model aircraft. The impacts on these community resources will	Scoped out – the impacts on Kenyon Hall Airfield and Warrington Model Flying Club are considered to be permanent construction impacts and would not be assessed as part of the operation phase assessment.

Category	Determinant of health	Justification (construction)	Justification (operation)
		be assessed in the context of impacts on social participation, interaction and support.	
Economic environment	Education and training	Scoped out – while there is the potential for education and training opportunities as part of the Proposed Development, this would be addressed by Chapter 17: Socio-economics where appropriate and necessary. As an SRFI , there would be no impact on education facilities locally.	
	Employment and income	<p>Scoped in – the construction phase would generate temporary direct employment opportunities (primarily for construction workers), with associated indirect employment opportunities from supply chain activity (indirect) and local spending on goods and services by employees (induced).</p> <p>Having a consistent income and being in long-term employment are two of the most important wider determinants of health. As such, the population and human health effects associated with changes in socio-economic factors during the construction phase would be scoped into the ES to communicate the population and health</p>	<p>Scoped in – the Proposed Development would generate long-term direct employment opportunities, with associated employment opportunities from supply chain activity (indirect) and local spending on goods and services by employees (induced).</p> <p>The population and health topic would draw from and build upon key outputs from Chapter 17: Socio-economics in order to carry out the assessment and reach a conclusion regarding the significance of effect in population and health terms.</p>

Category	Determinant of health	Justification (construction)	Justification (operation)
		<p>benefits associated with this.</p> <p>The population and health topic would draw from and build upon key outputs from Chapter 17: Socio-economics in order to carry out the assessment and reach a conclusion regarding the significance of effect in population and health terms.</p>	
Bio-physical environment	Climate change mitigation and adaptation	<p>Scoped in – in addition to being addressed within Chapter 16: Energy and Climate Change, as part of the EIA Regulations, each topic (including population and human health), will consider the implications of climate change on the conclusions reached in the assessment. The population and health topic will therefore consider how the future impacts of climate change might alter the assessment conclusions.</p>	
	Air quality	<p>Scoped in – the construction phase is anticipated to contribute to local and temporary changes in air quality (dust, particulate matter and nitrogen dioxide) associated with on-site construction activities and additional traffic movements required for the delivery of construction materials and worker travel to/from the DCO Site.</p> <p>Embedded mitigation measures would be implemented in order to reduce the generation of dust and release of air pollutants, outlined within a Construction</p>	<p>Scoped in – traffic will be generated by operational staff and freight movements, with associated impacts on air quality. In addition, there would be a new energy centre.</p> <p>As such, the population and human health effects associated with changes to air quality from the Proposed Development would be scoped into the ES to assess the magnitude and distribution of such changes for existing residents and any other sensitive</p>

Category	Determinant of health	Justification (construction)	Justification (operation)
		<p>Environmental Management Plan (CEMP), Construction Traffic Management Plan (CTMP) and Travel Plan. While this is the case, this determinant will be scoped into the ES to further communicate how known hazards are addressed to prevent any material risk to human health.</p> <p>The population and human health topic would draw from and build upon key outputs from Chapter 7: Air Quality in order to carry out the assessment and reach a conclusion regarding the significance of effect in population and health terms.</p>	<p>receptors in the surrounding area.</p> <p>The population and human health topic would draw from and build upon key outputs from the Chapter 7: Air Quality in order to carry out the assessment and reach a conclusion regarding the significance of effect in population and health terms.</p>
	Water quality or availability	Scoped out – changes in water quality and availability will be adequately dealt with in Chapter 13: Hydrology. No further health assessment is considered necessary.	
	Land quality	Scoped out – the potential health impacts from ground conditions (e.g. exposure to contaminated land) will be included as part of the Chapter 14: Geology, Soils and Contaminated Land scope. No further health assessment is considered necessary.	
	Noise and vibration	Scoped in – the construction phase is anticipated to contribute to local and temporary changes in noise exposure	Scoped in – the Proposed Development would be operational 24 hours a day, 7 days a week, and traffic will be generated

Category	Determinant of health	Justification (construction)	Justification (operation)
		<p>associated with on-site construction activities and additional traffic movements required for the delivery of construction materials and worker travel to/from the DCO Site.</p> <p>Embedded mitigation measures, contained within a CEMP, would also contribute to a reduction of noise impacts. While this is the case, this determinant will be scoped into the ES to more effectively communicate the magnitude and distribution of potential impacts, and the resultant significance of effect on population and health, if any.</p> <p>The population and human health topic would draw from and build upon key outputs from the Chapter 8: Noise and Vibration in order to carry out the assessment and reach a conclusion regarding the significance of effect in population and health terms.</p>	<p>by rail movements and HGVs entering/exiting the DCO Site, with associated impacts on noise.</p> <p>As such, the human health effects associated with changes to noise exposure from operational development would be scoped into the ES to assess the magnitude and distribution of such changes for existing residents and any other sensitive receptors in the surrounding area.</p> <p>The population and human health topic would draw from and build upon key outputs from the Chapter 8: Noise and Vibration in order to carry out the assessment and reach a conclusion regarding the significance of effect in population and health terms.</p>
	Radiation	Scoped out – no significant sources of ionising or non-ionising radiation (e.g. electric and magnetic fields) would be introduced during construction or operation of the Proposed Development.	
Institutional and built environment	Health and social care services	Scoped in – as previously stated, given the scale of the construction employment, there is potential for a large non-home-based	Scoped out – the Proposed Development is for an SRFI , whereby the operational workforce would commute on a daily

Category	Determinant of health	Justification (construction)	Justification (operation)
		workforce. Therefore the impacts on demand for health and social care services will be assessed accordingly.	basis. As such, there would be no material impact on access to health and social care services.
	Built environment (i.e. man-made structures, features, and facilities)	Scoped out – the Proposed Development is for an SRFI and does not influence (positively or negatively) the built environment of any community.	
	Wider societal infrastructure and resources	Scoped out – the Proposed Development would not impact wider societal infrastructure and resources until operational.	Scoped out – the Proposed Development would deliver transport infrastructure, would contribute to economic development and a low carbon economy. However, these impacts would be dealt with in the relevant topic chapters and it is not considered necessary to provide additional analysis from a population and health perspective.

PROPOSED AVOIDANCE AND MITIGATION MEASURES

- 18.46 Mitigation measures adopted as part of the construction and operation of the Proposed Development will focus on precursors to health and wellbeing outcomes, thereby providing an opportunity for intervention to prevent any adverse health outcome.
- 18.47 During construction, best practice measures detailed within a dedicated CEMP will control the generation or release of environmental pollutants with the potential to cause adverse population and human health outcomes. Similarly a CTMP will be in place to manage construction traffic impacts on pedestrians and road users.

UNCERTAINTIES

- 18.48 The technical assessments above are reliant on key outputs of the inter-related topics. As a consequence, the limitations and uncertainties of those assessments also apply to any information used in the population and human health chapter (e.g. for modelling work undertaken). It is, however, considered that the information available will provide a suitable basis for the assessment of population and human health.

SUMMARY OF PROPOSED EIA SCOPE

- 18.49 A summary of the proposed scope of the population and human health assessment is provided in Table 18.6.

Table 18.6 Summary of population and human health impacts proposed to be scoped in and out of the EIA

Determinant of health	Construction	Operation
Physical activity	Scoped in	Scoped in
Risk taking behaviour	Scoped in	Scoped out
Diet and nutrition	Scoped out	Scoped out
Housing	Scoped out	Scoped out
Relocation	Scoped out	Scoped out
Open space, leisure and play	Scoped in	Scoped in

Determinant of health	Construction	Operation
Transport modes, access and connections	Scoped in	Scoped in
Community safety	Scoped out	Scoped out
Community identity, culture, resilience and influence	Scoped in	Scoped in
Social participation, interaction and support	Scoped in	Scoped out
Education and training	Scoped out	Scoped out
Employment and income	Scoped in	Scoped in
Climate change mitigation and adaptation	Scoped in	Scoped in
Air quality	Scoped in	Scoped in
Water quality or availability	Scoped out	Scoped out
Land quality	Scoped out	Scoped out
Noise and vibration	Scoped in	Scoped in
Radiation	Scoped out	Scoped out
Health and social care services	Scoped in	Scoped out
Built environment	Scoped out	Scoped out
Wider societal infrastructure and resources	Scoped out	Scoped out

Chapter 19 ◆ Major Accidents and Disasters

INTRODUCTION

- 19.1 This chapter sets out the proposed approach to assess the potential effects deriving from the vulnerability of the Proposed Development to relevant major accidents and disasters (MAD), and the potential for the development to cause major accidents and disasters, as required by the EIA Regulations.
- 19.2 For the purposes of this chapter, accidents are considered to be an occurrence resulting from uncontrolled developments in the course of construction and operation of a development (e.g. major emission, fire or explosion). Disasters can result from man-made hazards, such as terrorist acts, or natural hazards, such as naturally occurring extreme weather events or ground related hazard events (e.g. subsidence, landslide, earthquake).
- 19.3 In line with the EIA Regulations, this Scoping Report Chapter has been compiled by appropriately qualified, experienced, and competent experts. The author of this chapter is Millie Potter MSc PIEMA REnvP, an Environmental Consultant. This chapter has been reviewed by Erin Banks MEnvSci MIEMA CEnv (20 years of relevant UK experience). The team are experienced in the assessment of major projects in the NSIP regime.

RELEVANT LAW, POLICY AND GUIDANCE

- 19.4 Schedule 4, Paragraph 8 of the EIA Regulations requires an Environmental Statement (ES) to provide:

“A description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned. Relevant information available and obtained through thorough risk assessments pursuant to EU legislation ... or UK environmental assessments may be used for this purpose provided that the requirements of this Directive are met. Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.”

- 19.5 Paragraph 4.62 of the National Networks National Policy Statement (NPSNN) states that:

“It is the government’s policy, supported by legislation, to ensure that the risks of passenger and workforce accidents are reduced so far as reasonably practicable. Rail schemes should take account of this and seek to further improve safety at every opportunity and where there is value for money in doing so.”

- 19.6 Paragraph 4.64 of the NPSNN requires that:

“The applicant should be able to demonstrate that their scheme is consistent with all relevant regulations, industry guidance and regulatory guidance from the Office of Road and Rail, and that their safety assessment has considered the cost and safety implications during the construction, commissioning and operational phases of the development”.

- 19.7 In terms of security considerations, Paragraph 4.67 states that it is the government’s policy to *“ensure that, where possible, proportionate protective security measures are designed into new infrastructure projects at an early stage in the project development”.*
- 19.8 Best practice and guidance on the assessment of major accidents and disasters is set out in the *‘Major Accidents and Disasters in EIA: A Primer’*, published by the Institute of Environmental Management and Assessment (IEMA). This guidance will be followed.

CONSULTATION TO DATE

- 19.9 No consultation regarding the topic of major accidents and disasters has been undertaken, it is anticipated that through the pre-application process, relevant parties will engage with the consultations for the Intermodal Logistics Park North Rail Freight Interchange (ILPN RFI) and inform the further assessment of MAD.

APPROACH AND METHODOLOGY

- 19.10 In line with *‘Major Accidents and Disasters in EIA: A Primer’*, the likely vulnerability of the Proposed Development to major accidents or disasters will be considered against the following three criteria:

- Is the development a source of hazard that could result in a major accident and/or disaster?
- Does the development interact with any external sources of hazard?
- If an external man-made or natural hazard occurred, would the presence of the development increase the risk of significant environmental effect(s) to an environmental receptor occurring?

- 19.11 The ES chapter will assess the identified major accidents or disasters (described below) and explain the control measures in place to ensure that the Proposed Development’s vulnerability to accidents and disasters results in the risk of potential significant effects being As Low As Reasonably Practicable (ALARP). The term ALARP describes the desirable level with which risks are managed and controlled. For a risk to be defined as ALARP a risk must be appropriately managed through the use of mitigation. ALARP in EIA terms can also be defined as not significant.

PRELIMINARY ASSESSMENT OF POTENTIAL EFFECTS

- 19.12 The potentially relevant accidents or disasters are considered to arise from:
 - construction hazards (including demolition and closure of existing buildings and operations on the DCO Site);

- flooding and damage due to severe weather events;
- major transport and industrial accidents;
- malicious attacks;
- transportation of hazardous loads;
- hazardous waste; and
- increased rail freight movements.

19.13 These are considered in more detail below. It is proposed that all identified accidents or disasters are scoped into the EIA in order to provide an assessment of likely significant effects.

Construction hazards

19.14 The construction of the Proposed Development will involve many key activities such as the demolition of existing on-site structures; earthworks; construction of a Strategic Rail Freight Interchange (SRFI) including ancillary development such as container storage, Heavy Goods Vehicle (HGV) parking, rail control building and staff facilities; construction of Use Class B8 warehousing; construction of a rail turn-back facility within the Western Rail Chord; potential for construction of new road/pedestrian bridges across the Chat Moss Line; construction of new road infrastructure and works to existing road infrastructure; and a new energy centre and substation. The EIA will assess the vulnerability of the Proposed Development to construction hazards, considering construction methodologies and mitigation measures as appropriate.

Flooding and damage due to severe weather events

19.15 In order to consider the Proposed Development's vulnerability to flooding and damage caused by severe weather events, Chapter 13: Hydrology will provide a flood risk assessment, with allowance for climate change, and Chapter 16: Energy and climate change will provide an assessment of the Proposed Development's resilience to the potential impacts of climate change, such as those from severe weather events. The EIA will draw from these chapters to assess the Proposed Development's vulnerability to flooding and damage due to severe weather events.

Major transport and industrial accidents

19.16 Transport accidents on the strategic and local highway network, as well as accidents within the Proposed Development boundary including rail related risks, will be assessed within the EIA to determine the Proposed Development's vulnerability to major transport and industrial accidents, as well as the Proposed Development's potential influence on major transport and industrial accidents.

Malicious attacks

19.17 Transport systems and infrastructure, such as the Proposed Development, may be the targets of malicious attacks. The EIA will assess the Proposed Development’s vulnerability to malicious attacks and consider mitigation measures and emergency response procedures as necessary.

Transportation of hazardous loads

19.18 Like other SRFIs, it is anticipated that the Proposed Development will cater for occupiers who will handle non-hazardous products and materials and the only likely source of hazardous loads anticipated at this stage would be related to fuel deliveries and fuelling facilities. However, this is yet to be confirmed and so the risk to the Proposed Development from the transportation of hazardous loads cannot be scoped out at this stage. It is proposed that the EIA assess the Proposed Development’s vulnerability to the transportation of hazardous loads should this be handled during operation.

Hazardous waste

19.19 Similar to the transportation of hazardous loads, whilst it is not expected that any significant quantity of hazardous waste will be produced during the operational phase, it is not yet known and so cannot be scoped out at this stage. It is proposed that the EIA assess the Proposed Development’s vulnerability to hazardous waste should this be produced during operation.

Increased rail freight movements

19.20 The EIA will assess the ability of the Proposed Development to operate safely within the rail network. Additionally, risks to pedestrians and motorists from increased rail freight movements beyond the draft Order Limits as a result of the Proposed Development, such as risks at level crossings, will be assessed and mitigation measures provided as necessary.

SUMMARY OF PROPOSED EIA SCOPE

19.21 The proposed scope for the MAD chapter is presented in Table 19.1.

Table 19.1 Summary of major accidents and disasters impacts proposed to be scoped in and out of the EIA

Impacts	Scoped in or out?	Justification
Construction		
Construction hazards	In	Further assessment is required to ensure the Proposed Development’s risk of significant

Impacts	Scoped in or out?	Justification
		effects resulting from major accidents and disasters is ALARP.
Operation		
Flooding and damage due to severe weather events; major transport and industrial accidents; malicious attacks; transportation of hazardous loads; hazardous waste; increased rail freight movements.	In	Further assessment is required to ensure the Proposed Development’s risk of significant effects resulting from major accidents and disasters is ALARP.

Chapter 20 ◆ Cumulative and in-combination effects

INTRODUCTION

- 20.1 This section of the Scoping Report sets out how it is intended to approach the cumulative effects assessment (CEA) in accordance with the Planning Inspectorate’s (PINS) advice on ‘Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment’ and its suggested methodology. The PINS advice was updated in September 2024 and replaces the previous advice note 17.
- 20.2 The requirement for cumulative effects assessment is set out in Article 4(3) and Article 5(1) of the Environmental Impact Assessment (EIA) Directive and under the Planning Act 2008 for NSIPs, is implemented through the EIA Regulations.
- 20.3 Schedule 4 of the EIA Regulations provides relevant information for inclusion in environmental statements. Paragraph 5 of Schedule 4 to the regulations states that *‘the description of the likely significant effects on the factors specified in regulation 5(2) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the development’*. Paragraph 5(e) of Schedule 4 states that the ES must include a description of the likely significant effects relating to *“the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources”*.
- 20.4 The cumulative impact comprises the combined effects of the Proposed Development with other existing and/or approved development. No detailed definition is provided in the EIA Regulations to clarify what existing and/or approved development should consist of. In the current context it is considered appropriate to consider other developments that have been allocated in a development plan, and developments that have been consented or remain under formal consideration in the planning process.
- 20.5 The ES for the Proposed Development will consider which other developments have the potential for cumulative effects on the same receptors as the project within a defined geographical area known as the Zone of Influence (ZOI). The significance of the cumulative effects needs to be considered with regard to the effects on specific environmental receptors, which will include the characteristics of the natural environment as well as the neighbouring residents/communities.

BASELINE CONDITIONS

- 20.6 The baseline assessment will be defined by the effects of the Proposed Development on the environmental receptors as set out in the technical chapters of the ES in conjunction with

other projects that are expected to be completed before construction of ILPN RFI. This baseline position will be used to compare the significance of the impact on environmental receptors when taking into account the cumulative impact of the Proposed Development and the shortlisted other development in the ZOI.

APPROACH AND METHODOLOGY

- 20.7 Given the scale and nature of ILPN RFI it is acknowledged that a broad spatial and temporal ZOI is generally expected. PINS has provided in their advice a methodology to approaching CEA in the context of NSIPs. PINS encourage applicants to follow this methodological approach where it is appropriate to do so and it is intended to adopt this approach where possible.
- 20.8 This Scoping Report provides the first step of stage 1 of PINS suggested methodology to establish the project’s ZOI in respect of each of the technical chapters of the ES.
- 20.9 The intended ZOI to be employed in the CEA is shown in the table below, with distances provided from the draft Order Limits (including offsite highways works).

Table 20.1 Zones of influence to be employed in the assessment of cumulative effects – summary table

Environmental Topic	Zone of Influence (ZOI) from draft Order Limits
Ecology	The assessment will be focussed on local sites and protected species and the ZOI will take into account cumulative schemes within 2km of the DCO Site. A ZOI of 10km from the DCO Site will be used for internationally designated sites.
Air Quality	<p>The ZOI for construction dust impacts will be 500m from the DCO Site.</p> <p>The ZOI for traffic related effects, considering commuting distances and any cumulative impact expected from traffic generation, distribution and associated emissions from cumulative schemes, will be defined by the transport assessment. It is considered that the assessment of vehicle emissions are inherently cumulative as they incorporate modelled traffic data growth for future traffic flows.</p> <p>The ZOI for rail emissions outside of the DCO Site is classified as rail related schemes within the area covered by the Liverpool City Region, the Greater Manchester Combined Authority and Warrington Borough Council. In accordance with Department for Environment, Food and Rural Affairs guidance, consideration will be given to receptors within a lateral distance of 30m from the track along the identified longitudinal extent where the background nitrogen dioxide (NO₂) concentration is above 25µg/m³.</p>

Environmental Topic	Zone of Influence (ZOI) from draft Order Limits
Hydrology	The ZOI for Hydrology is proposed to be the DCO Site and the adjacent Highfield Moss SSSI.
LVIA	The ZOI for LVIA is proposed to be 5km from the DCO Site, which is a maximum study area extent based on the preliminary Zone of Theoretical Visibility (ZTVs) of proposed buildings at a maximum height of 35m above existing ground level. The 5km radius is measured from the DCO Site as a ‘worst-case’ extent with regards identifying potential significant effects and may be refined further as the design is developed.
Noise	<p>The ZOI is proposed to be up to 1km from the DCO Site for construction noise and operational noise (excluding road traffic noise and railway noise).</p> <p>The road traffic noise ZOI during construction and operation would be in line with the transport ZOI, although it is considered that the assessment of road traffic noise is inherently cumulative as the future traffic flows incorporate modelled traffic growth.</p> <p>The ZOI for railway noise outside of the DCO Site will be determined by the longitudinal distance along the track from the proposed connection between the mainline railways and the RFI. This distance has not yet been confirmed, however, it will consider the acceleration and deceleration distance of the freight trains which will use the DCO Site. In accordance with the Noise Insulation Regulations, consideration will be given to receptors within a lateral distance of 300m from the track along the identified longitudinal extent.</p> <p>In regards to vibration, the ZOI will be 100m from the DCO Site, or a lateral distance of 100m from the track along the identified longitudinal distance along the lines it takes for the trains to accelerate and decelerate to enter/exit the RFI.</p>
Ground	The ZOI will be 250m from the DCO Site, which is typically the accepted distance up to which significant contamination could migrate.
Population and Health	The ZOI would align with the air, noise, transport and socio-economics ZOI. The ZOI assessment of physical activity, open space, leisure and play will be the DCO Site; the employment and income ZOI will be 30km from the DCO Site; the air quality ZOI will be 500m from the DCO Site for construction;

Environmental Topic	Zone of Influence (ZOI) from draft Order Limits
	and the noise ZOI will be 1km from the DCO Site for construction. The ZOI for the assessment of transport modes, access and connections, traffic noise and traffic emissions would be in line with the transport, air quality and noise ZOI.
Socio-economics	The ZOI for socio-economic effects, in line with best practice and experience, is 30km from the DCO Site. This is anticipated to represent an appropriate area to capture labour market effects, though this will be kept under review.
Transport	<p>Discussions with relevant local and national highway authorities are ongoing with regards to scope and approach to transport modelling and transport assessment. Approach to trip generation and trip distribution is a key part of this, and will ultimately define the ZOI for transport, which cannot currently be assumed. Transport will have influence on, or be influenced by, as a minimum air quality, noise and socio-economics.</p> <p>Notwithstanding the above, some assessments, such as transport and associated assessments of vehicle emissions (including air and noise), are inherently cumulative as they incorporate modelled traffic data growth for future traffic flows. As these assessments will be thorough and will include a worst-case assessment, no additional cumulative assessment of these aspects is anticipated to be required, in line with PINS advice “<i>Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment</i>” dated September 2024.</p>
Built heritage	A ZOI of 1km is considered to be proportionate to capture designated and non-designated heritage assets which may be affected (in line with NPSNN paragraph 5.2.10).
Archaeology	A ZOI of 1km is proposed, which is to be agreed with the Archaeology Advisory Teams to the LPAs.
Materials and Waste	A ZOI of 20km is proposed, which may be refined further. This is considered to be proportionate given the likely effects of the Proposed Development and has been defined to account for the DCO Site, Local Waste Facilities, Transport Routes and Regional Waste Facilities.

20.10 It is intended to develop a list of ‘other development’ as required by Stage 1 through desk based studies including the following:

- Planning Register searches of St Helens Borough Council, Wigan Council and Warrington Borough Council;
- Review of Development Plan documents of St Helens Borough Council, Wigan Council and Warrington Borough Council and minerals and waste plan documents of Liverpool City Region and the Greater Manchester Authority;
- Greater Manchester Region Combined Authority Places for Everyone Plan;
- Cumulative site lists provided by the respective LPAs; and
- PINS’s online NSIP register.

20.11 At this stage of scoping, the significant projects already identified as part of Stage 1 and to be taken forward to the shortlisting process of Stage 2 includes ‘Phase 1: Land Site Of Former Parkside Colliery, Winwick Road, Newton Le Willows, St Helens (P/2018/0048/OUP and APP/2020/0007/CALL) and the respective Reserved Matters applications (P/2023/0341/RES and P/2023/0342/RES)’. This is an outline application for the construction of up to 92,900 m² of employment floorspace and associated servicing and infrastructure directly to the west of the Proposed Development. Phase 2: Hybrid application for former Parkside Colliery comprising up to 154,612 m² of employment floorspace (P/2024/0419/HYEIA). These are collectively known as the allocated site ‘Parkside West’ (Policy 8EA) in the St Helens Borough Council Local Plan.

20.12 The list of other existing and/or approved developments identified will then be categorised into tiers based upon PINS methodology, which focuses on the level of certainty that can be attributed to each development. The following categories will be used:

- Tier 1 – Under construction, permitted or applications/appeals under consideration – Greatest level of certainty.
- Tier 2 – Projects on PINS’s Programme of Projects where a scoping report has been submitted – Less certainty.
- Tier 3 – Project on PINS’s NSIP register, where a scoping report has not been submitted, identified in a relevant development plan or identified in other plans and programmes where it is reasonably likely to come forward – Greatest level of uncertainty.

20.13 Stage 2 will then consider the temporal scope, scale and nature of these other developments as well as any other relevant factors to determine which developments should be taken forward to stage 3 and be subject to the CEA. It is proposed to utilise the matrix table provided in Appendix 1 of the PINS advice on cumulative impact assessment. It is expected that many of the other developments identified will be scoped out of the CEA due to their remoteness

from the DCO Site. Under these circumstances, justification will be provided for the exclusion of sites from the shortlist of other developments taken forward to CEA.

- 20.14 Stages 3-4 will be undertaken alongside preparation of the ES after the formal scoping opinion has been received. In summary, stage 3 would consist of information gathering and documentation in respect of the shortlisted developments and will be used to inform the CEA before stage 4 and the assessment process. The assessment process will consider the shortlisted other developments and document whether cumulative effects may arise. Any adverse effects will be documented and appropriate mitigation plans will be developed and submitted as part of the DCO submission documentation.

IN-COMBINATION EFFECTS

- 20.15 In line with PINS advice on cumulative impact assessment, the potential for in-combination effects will be assessed in the ES and presented in the cumulative chapter. In-combination effects are identified where multiple impacts from the Proposed Development combine to affect the same sensitive receptor. The in-combination effects identified in the ES will be assessed using professional judgement and a qualitative assessment approach. The assessment will also take into account proposed mitigation where this mitigates the potential effect on the receptor and this will be reported in the cumulative ES chapter.

TRANSBOUNDARY EFFECTS

- 20.16 Certain types of major development might exert environmental effects that extend beyond the boundary of the nation-state in which the Proposed Development would be located. PINS advice (Transboundary Impacts and Process (September 2024)) offers guidance on the procedures for transboundary consultation associated with a DCO application.
- 20.17 Having considered the nature and location of the Proposed Development, the Applicant is not aware of any potential impact pathways which may lead to transboundary effects on European Economic Area (EEA) States. Therefore, it is not considered that the Proposed Development would give rise to significant transboundary effects and so the issue is proposed to be scoped out from consideration as part of the ES.

PRELIMINARY ASSESSMENT OF POTENTIAL EFFECTS

- 20.18 It is not intended to address every individual receptor contained within the technical chapters of the ES for potential cumulative environmental effects. The receptors to be considered in the context of cumulative impact will be those that are identified as sensitive to the cumulative effects of the shortlisted development to be taken forward for CEA within the ZOI.
- 20.19 EIA topics with potential for cumulative are socio-economics, landscape and visual and transport and traffic. Most of the technical analyses in the ES are considered likely to identify effects sensitive to the DCO Site only or in the immediate locality, such that they will not be affected or influenced cumulatively by other development.

SUMMARY OF PROPOSED EIA SCOPE

- 20.20 The CEA will consider the cumulative effects of other development on representative

receptors within a zone of influence of the ILPN RFI. This scoping report seeks to identify an agreed scope for identifying other developments which will also be discussed and agreed with the relevant local planning authorities as part of ongoing discussions in respect of the development proposals. Following agreement of a shortlist of 'other development' to be taken forward to CEA, the cumulative effects of ILPN RFI in combination with the identified other development on receptors sensitive to cumulative impact will be considered in the ES.

Chapter 21 ◆ Summary and next steps

TOPICS TO BE SCOPED OUT

- 21.1 This Scoping Report has set out the Applicant's existing knowledge of the environment in the DCO Site and its surroundings, provided a description of the proposed ILPN RFI and identified the anticipated likely significant environmental effects of the Proposed Development during construction and operation. On the basis of existing knowledge it is concluded that no environmental topics as a whole should be 'scoped out' of the EIA at this stage. However, as set out in the technical chapters of this Scoping Report and as summarised in the table contained in section five, it is proposed that certain elements of environmental topics be scoped out where there are no identified impact pathways or sensitive receptors.
- 21.2 Should this conclusion change materially in the light of accumulating knowledge, the Applicant will seek to receive a revised Scoping Opinion from the SoS.

REQUEST FOR A SCOPING OPINION

- 21.3 This Scoping Report comprises the Applicant's formal request under Regulation 10(1) of the EIA Regulations for an opinion as to the scope and the level of detail, of the information to be provided in the ES for ILP North.
- 21.4 The Applicant considers that it has complied with the requirements of Regulation 10(3) of the EIA Regulations concerning the information to be supplied with an EIA scoping request.

PRELIMINARY ENVIRONMENTAL INFORMATION

- 21.5 The Applicant will produce a Preliminary Environmental Information Report (PEIR) to inform its statutory pre-application consultations about the Proposed Development. This will be prepared in accordance with the requirements set out in Regulation 12(2) of the EIA Regulations and should enable specialist and non-specialist consultees to understand the likely environmental effects of the Proposed Development and help to inform their consultation responses on the Proposed Development. The Applicant proposes to structure the PEIR in the form of a draft ES.

ENVIRONMENTAL STATEMENT FOR THE DCO APPLICATION

- 21.6 The Applicant's DCO application will be accompanied by an ES that complies with the EIA Regulations. The content of the ES will reflect the Scoping Opinion here requested from the SoS.

PRELIMINARY COMMITMENTS REGISTER

- 21.7 The table below provides a preliminary register of the mitigation commitments anticipated to be required for the Proposed Development. At this stage these are based on an initial consideration of the commitments known to be required or proposed at this point in time, as identified through the preceding Scoping Report chapters, and those that the Applicant understands likely to be required or proposed at a later stage.
- 21.8 A full Commitments Register, setting out all identified environmental actions and commitments will be provided with the PEIR and subsequently the ES as an appendix to the conclusion chapter. The Commitments Register will be drafted in accordance with and contain all relevant information as set out in the September 2024 PINS advice¹.

¹ <https://www.gov.uk/guidance/nationally-significant-infrastructure-projects-commitments-register>

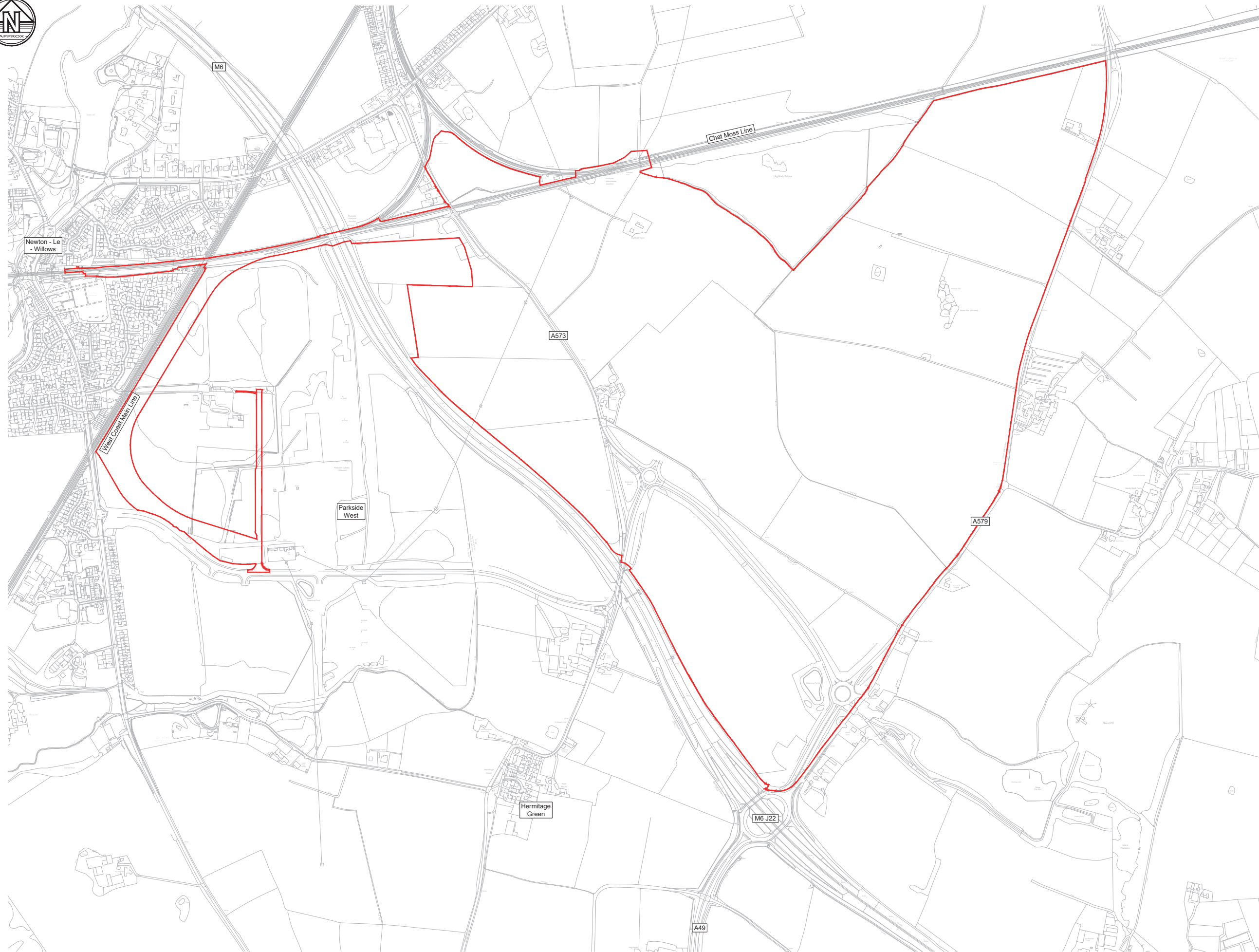
Table 21.1 Preliminary Commitments Register

Measure Description	Description / Justification	Securing Mechanism
<p>Construction Environment Management Plan (CEMP)</p>	<p>The purpose of the CEMP will be to specify the overarching principles and measures to manage and mitigate the effects of the activities associated with the construction of the Proposed Development. It will also ensure that construction activities cause minimum disruption to people, businesses and the environment.</p> <p>The CEMP will aim to:</p> <ul style="list-style-type: none"> • ensure the relevant mitigation measures set out in the ES together with any additional mitigation measures in support of the DCO application are implemented during all construction activities; • take into account relevant planning policy; and • ensure that relevant legislation, Government and industry standards, and construction industry codes of practice and best practice standards are complied with. <p>At this stage it is anticipated that the CEMP will cover the following matters:</p> <ul style="list-style-type: none"> • Construction Method Statements; • Construction Programme and Activities; • Access and Traffic Management; • Site Strategy; • Training, Site Rules and Communication with the Community; • Environmental Control Measures (covering the following topics: Noise and vibration; 	<p>Overarching CEMP secured through requirement in the DCO</p> <p>Will require the preparation of phase specific CEMPs to be approved by relevant LPAs.</p>

Measure Description	Description / Justification	Securing Mechanism
	<p>dust and air quality; visual impact; ecology; archaeology; water resources and flood risk; and, ground conditions, contamination and hazardous material);</p> <ul style="list-style-type: none"> • Materials and Resource Use and Waste Management; and • Auditing and Review. 	
<p>Construction Traffic Management Plan (CTMP)</p>	<p>The purpose of the CTMP will be to address adverse effects of construction on the local highway network.</p> <p>The overarching CTMP will be prepared and submitted as part of the DCO application and prior to the commencement of construction works on each phase of the Proposed Development a detailed CTMP will be prepared and submitted.</p>	<p>Overarching CTMP secured through requirement in the DCO</p> <p>Will require the preparation of phase specific CTMPs to be approved by relevant LPAs.</p>
<p>Framework Travel Plan (FTP) to be implemented in accordance with the approval by the relevant planning authority.</p>	<p>The FTP will help to embed sustainable travel practices into the Proposed Development and promote and encourage increased travel by sustainable forms of transport, such as walking, cycling and public transport for all journey purposes.</p> <p>The FTP is the initial stage of the travel planning process and focuses on employees, visitors and residents of the Proposed Development and will contain a list of potential measures that could be implemented to affect modal choice and a management strategy for producing a full TP in the future.</p> <p>Individual occupiers will be required to prepare TPs once the DCO Site is constructed and operational to be in accordance with the FTP.</p>	<p>Overarching FTP secured through requirement in the DCO</p> <p>Will require the preparation of individual occupier TPs to be approved by relevant LPAs.</p>
<p>Sustainable Transport Strategy</p>	<p>The STS will set out a strategy for public transport and active travel and will seek to deliver options that give staff a reliable, timely and economic alternative to driving to complement</p>	<p>STS secured through requirement in the DCO</p>

Measure Description	Description / Justification	Securing Mechanism
(STS)	the walking and cycling options.	
Operational HGV Routeing Strategy	<p>The purpose of the Operational HGV Routeing Strategy will be to ensure that traffic and travel in respect of route choices and timing of movements is controlled as far as practical, in agreement with the local highway authorities and enforceable in planning. The Strategy will identify preferred HGV routes which avoid sensitive locations and follow appropriate routes to the Strategic Road Network. The document prepared and submitted with the DCO application will be a framework providing the overarching approach and requirements.</p> <p>Individual occupiers will be required to develop their own Operational HGV Routeing Strategy once the DCO Site is constructed and operational to be in accordance with the DCO Site wide Operational HGV Routeing Strategy.</p>	<p>Overarching strategy secured through requirement in the DCO</p> <p>Will require the preparation of occupier strategies to be approved by relevant LPAs.</p>
Site Waste and Materials Management Plan (SWMMP)	<p>The purpose of the SWMMP is to reduce effects of construction on landscape features including protecting and enhancing soil and establishment of landscaping.</p> <p>The framework SWMMP will be secured through the DCO and phase specific SWMMPs will be prepared once a Principal Contractor is in place.</p>	<p>Overarching SWMMP secured through requirement in the DCO</p> <p>Will require the preparation of phase specific SWMMPs to be approved by relevant LPAs.</p>
Ecological Mitigation and Management Plan	<p>The purpose of this document is to demonstrate the measures required during the construction phase of the Proposed Development to protect and mitigate impacts on the ecological receptors identified within the DCO Site. The EMMP links to the measures set</p>	<p>EMMP secured through requirement in the DCO</p>

Measure Description	Description / Justification	Securing Mechanism
(EMMP)	out within the CEMP and provides greater detail and protection for ecological receptors.	
Landscape and Ecological Management Plan (LEMP)	The purpose of the LEMP is to set out the details of the habitat to be retained and created, and its management and monitoring for the benefit of nature conservation, through the operational phase of the Proposed Development.	LEMP secured through requirement in the DCO
Remediation Strategy	The Remediation Strategy details measures (e.g. clean soil cover) to manage the risks associated with contamination of the DCO Site in respect of controlled waters and soil.	Remediation Strategy secured through requirement in the DCO
10% Biodiversity Net Gain (BNG)	The Applicant is committing to a 10% net gain in biodiversity for the Proposed Development.	Securing mechanism is to be confirmed.



SCALE: METRES

Notes

1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
2. All dimensions in metres unless noted otherwise.
3. All levels in metres unless noted otherwise.

Legend

— DRAFT order limits

P06	04.11.24	Presentational amendment (order limits unchanged)	SRH	SRH
P05	23.09.24	Limits updated	EP	SRH
P04	20.09.24	Limits updated	EP	SRH
P03	19.09.24	Limits updated	EP	SRH
P02	19.09.24	Limits updated	EP	SRH
P01	18.09.24	First Issue	EP	SRH
Rev	Date	Details of issue / revision	Drw	Rev

Issues & Revisions



Birmingham | 0121 233 3322
 Leeds | 0113 233 8000
 London | 020 7407 3879
 Manchester | 0161 233 4260
 Nottingham | 0115 924 1100
www.bwbconsulting.com

Client



Project Title

INTERMODAL LOGISTICS PARK NORTH

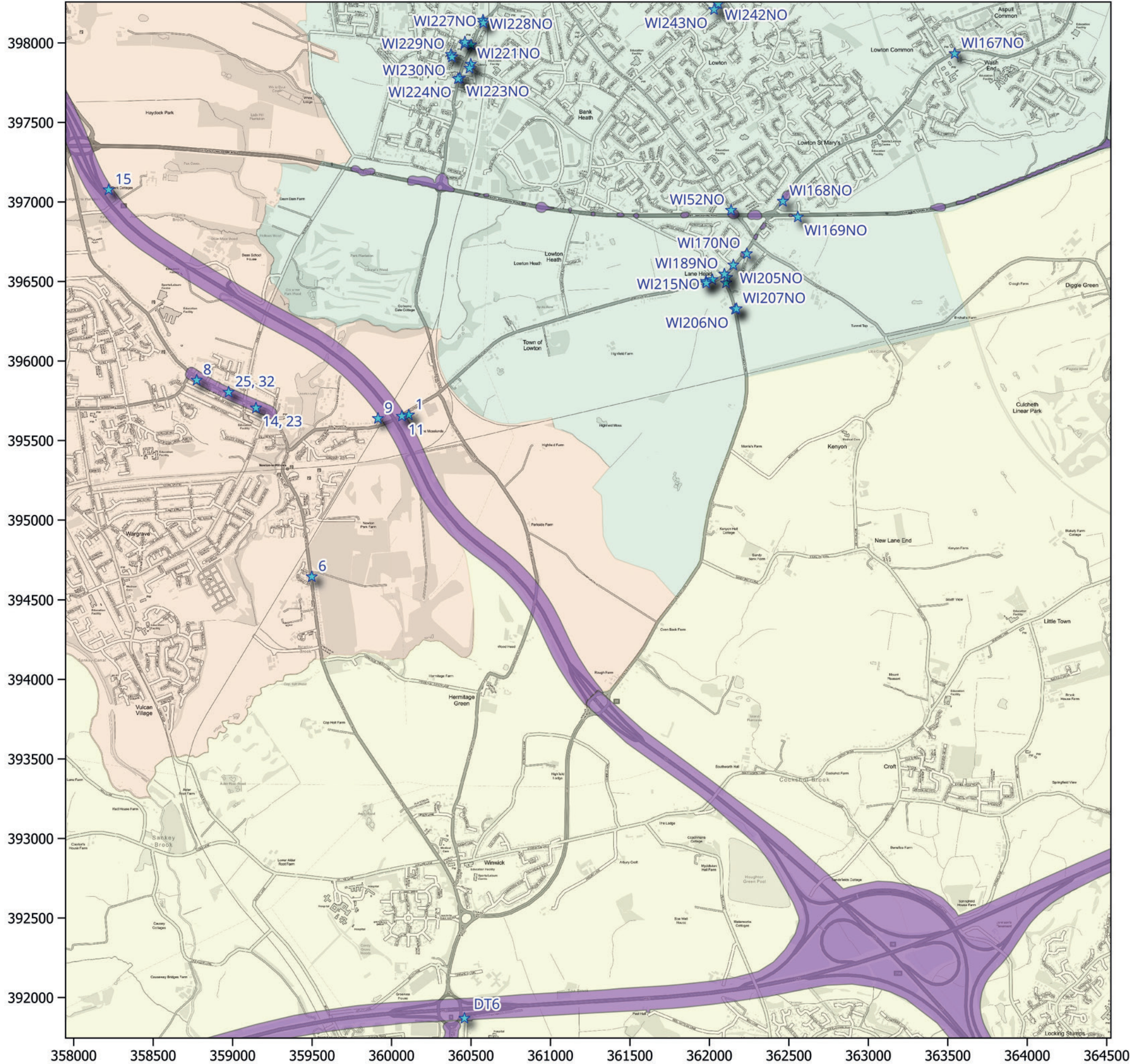
Drawing Title

**FIGURE 1.1
DRAFT ORDER LIMITS**

Drawn:	E. Painter	Reviewed:	S. Hilditch
BWB Ref:	233398	Date:	18.09.24
Scale@A1:	1:5,000		

Drawing Status
PRELIMINARY

Project - Originator - Zone - Level - Type - Role - Number	Status	Rev
ILPN-BWB-HGN-ZZ-SK-CH-0021	S1	P06



**INTERMODAL LOGISTICS
PARK (ILP) NORTH**






Date: 10-10-2024

Paper size: A3

Scale: 1:25,000



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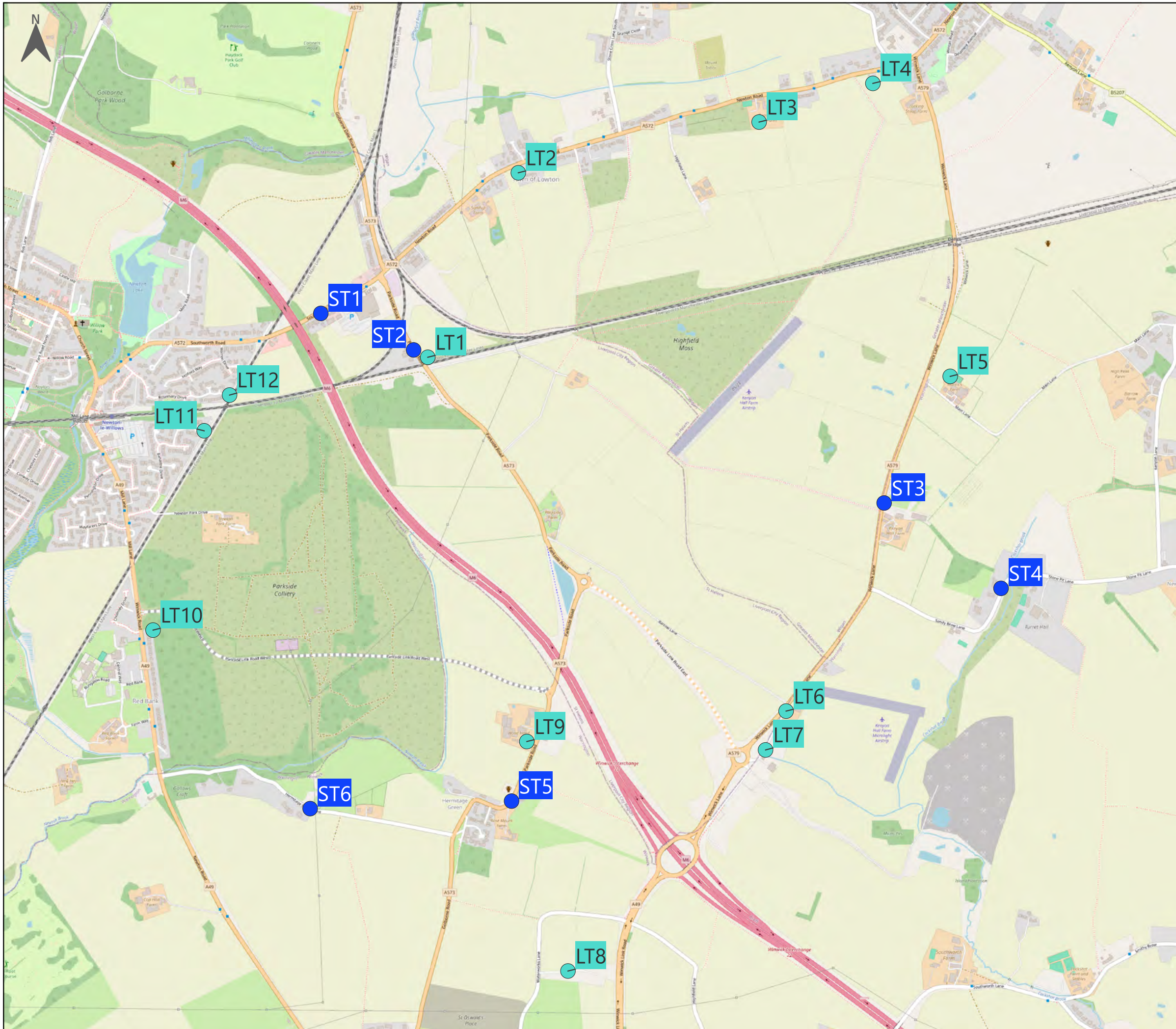
-  AQMA
-  Monitor
-  St. Helens
-  Warrington
-  Wigan



**Figure 7.1:
AQMA Extents and
Monitoring Locations**

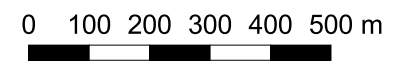
APFP Regulation:	N/A
Document Ref:	N/A
Drawing Number:	7.1
Drawing Status:	Final
Revision:	v1
Drawn by:	Emily Macey
Approved by:	Alex Crayton

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INTERMODAL LOGISTICS PARK (ILP) NORTH

Date: 09-10-2024
 Paper size: A3
 Scale: 1:12,500



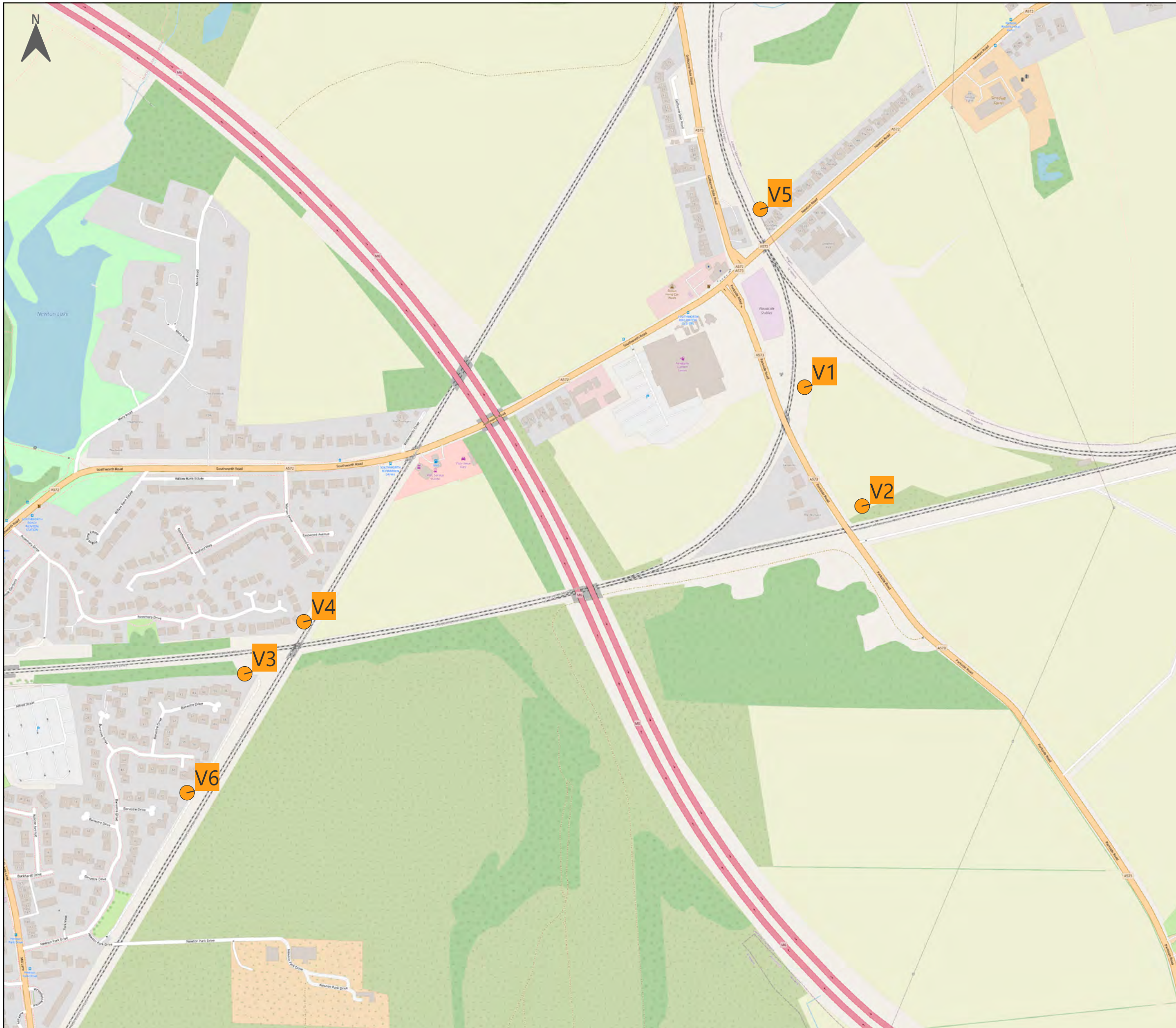
Key:

- Long Term Monitoring Locations
- Short Term Monitoring Locations



**FIGURE 8.2:
INITIAL SURVEY PLAN - NOISE**

APFP Regulation:	N/A
Document Ref:	N/A
Drawing Number:	0061210-0001
Drawing Status:	For information
Revision:	R03
Drawn by:	EL
Approved by:	AT

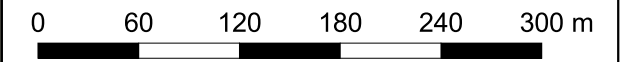


INTERMODAL LOGISTICS PARK (ILP) NORTH

Date: 09-10-2024

Paper size: A3

Scale: 1:4,500



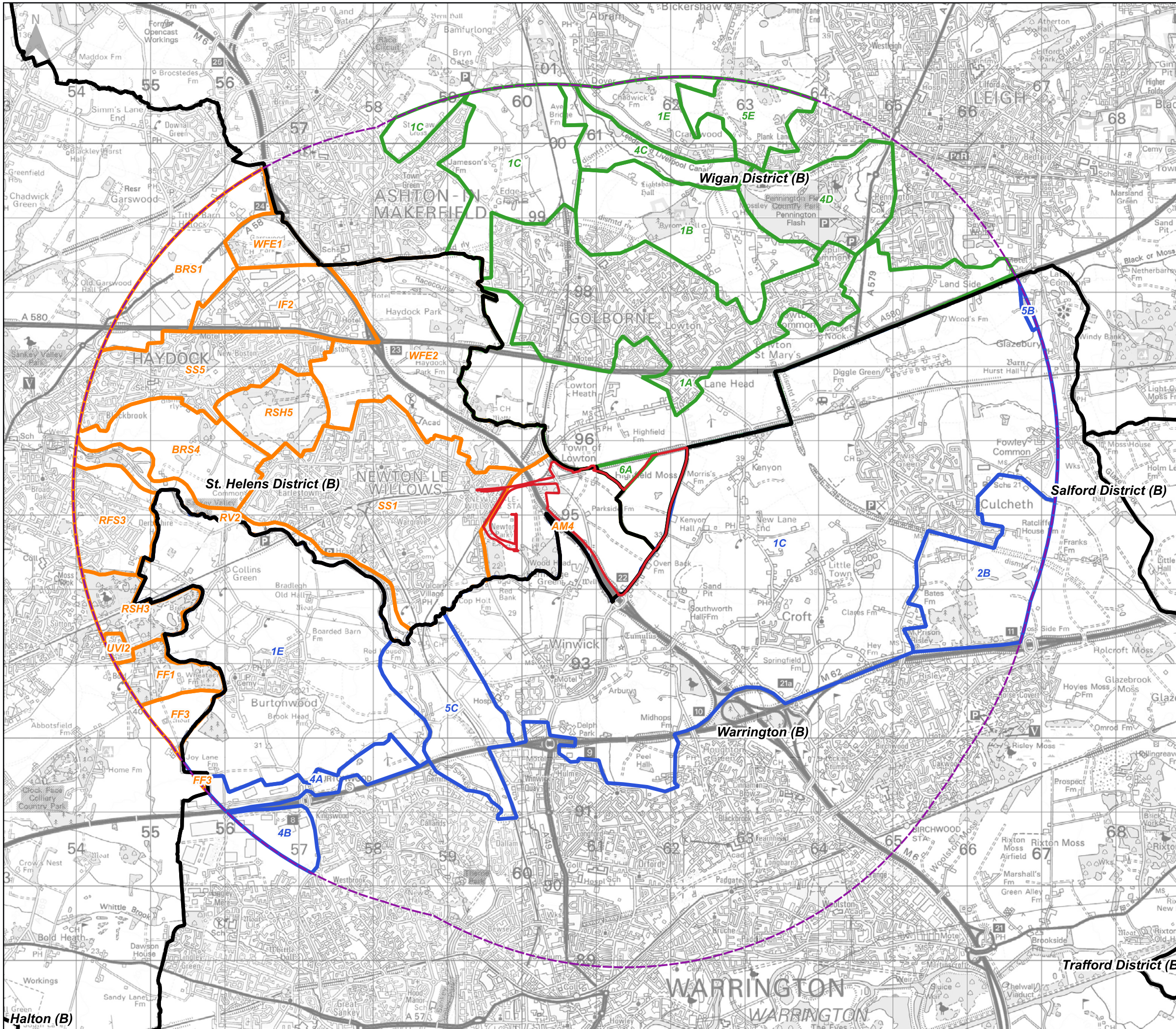
Key:

● Vibration Monitoring Locations



**FIGURE 8.3:
INITIAL SURVEY PLAN - VIBRATION**

APFP Regulation:	N/A
Document Ref:	N/A
Drawing Number:	0061210-0002
Drawing Status:	For information
Revision:	R03
Drawn by:	EL
Approved by:	AT

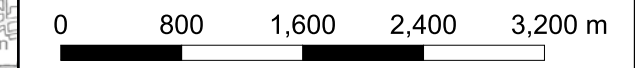


INTERMODAL LOGISTICS PARK (ILP) NORTH

Date: 01-11-2024

Paper size: A3

Scale: 1:50,000



Key:

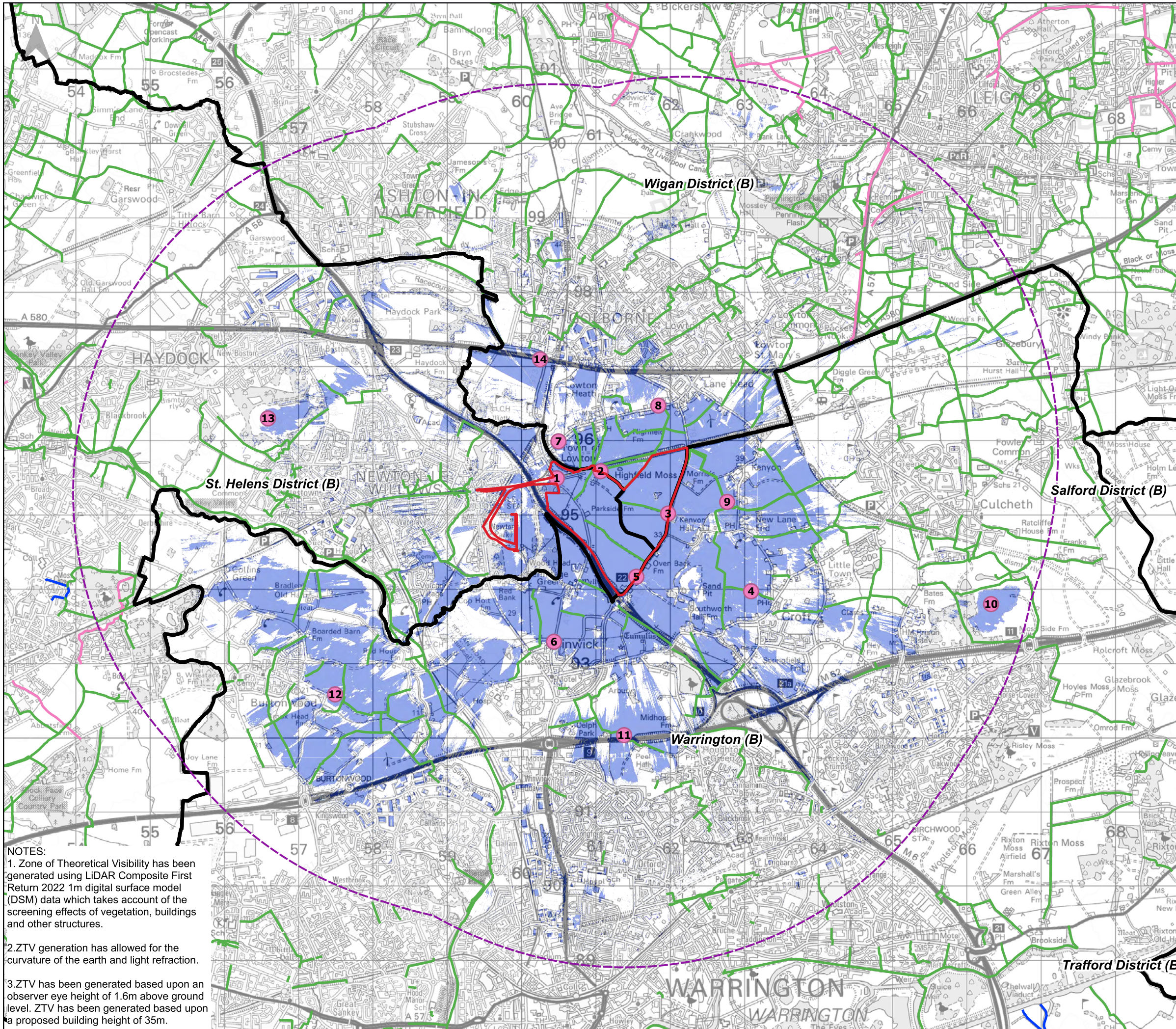
- Draft Order Limits
- 5km Study Area
- AM4 Highfield Moss
- BRS1 Arch Lane Slopes
- BRS4 Sankey Slopes
- FF1 Sutton Fringe
- FF3 Clock Face Farming
- IF2 Haydock Industrial Estate
- RFS3 Derbyshire Hill / Parr
- RSH3 Sutton Moss
- RSH5 Lyme and Wood Pit
- RV2 Sankey Valley
- SS1 Newton le Willows
- SS5 Haydock
- UVI2 Sutton Brook
- WFE1 Garswood Park
- WFE2 Haydock Park
- Undulating Enclosed Farmland
- 1C - Winwick, Culcheth, Glazebrook & Rixton
- 1E - Burtonwood
- Mossland Landscape
- 2B - Holcroft & Glazebrook Moss
- Level Areas of Farmland and Former Airfields
- 4A - Limekilns
- 4B - Former Burtonwood Airfield
- Flood Plain
- 5C - Sankey Brook
- Wigan Landscape Character Assessment (2009)**
- Undulating Enclosed Farmland
- 1A - East Lancs Road Corridor
- 1B - Aspull Common, Leigh to Bamfurlong
- 1C - Edge Green to Land Gate
- 1E - Fragmented Areas including Alder Farm (Hindley), Bickershaw /Crankwood, Hag Fold, Howe Bridge /Atherton Hall, Shakerley /Mosley Common, Hindsford Brook, Garrett Hall and Higher Green (Astley)
- Wetlands and Flashes
- 4C - Hey Brook Corridor
- 4D - Pennington Flash
- Degraded and Restored Landscapes
- 5E - Bickershaw
- Mossland
- 6A - Highfield Moss
- Warrington Landscape Character Assessment (2007)**
- Undulating Enclosed Farmland
- 1C - Winwick, Culcheth, Glazebrook & Rixton
- 1E - Burtonwood
- Mossland Landscape
- 2B - Holcroft & Glazebrook Moss
- Level Areas of Farmland and Former Airfields
- 4A - Limekilns
- 4B - Former Burtonwood Airfield
- Flood Plain
- 5C - Sankey Brook



Landscape Context Plan

APFP Regulation:	N/A
Document Ref:	N/A
Drawing Number:	Figure 9.1
Drawing Status:	FINAL
Revision:	P01
Drawn by:	SK
Approved by:	JM

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INTERMODAL LOGISTICS PARK (ILP) NORTH

Date:	01-11-2024
Paper size:	A3
Scale:	1:50,000

Key:

- Draft Order Limits
- 5km Study Area
- Local Authority Boundary
- Public Rights of Way
- Footpath
- Bridleway
- Restricted Byway
- Viewpoint Locations
- Zone of Theoretical Visibility
- Area of Visibility

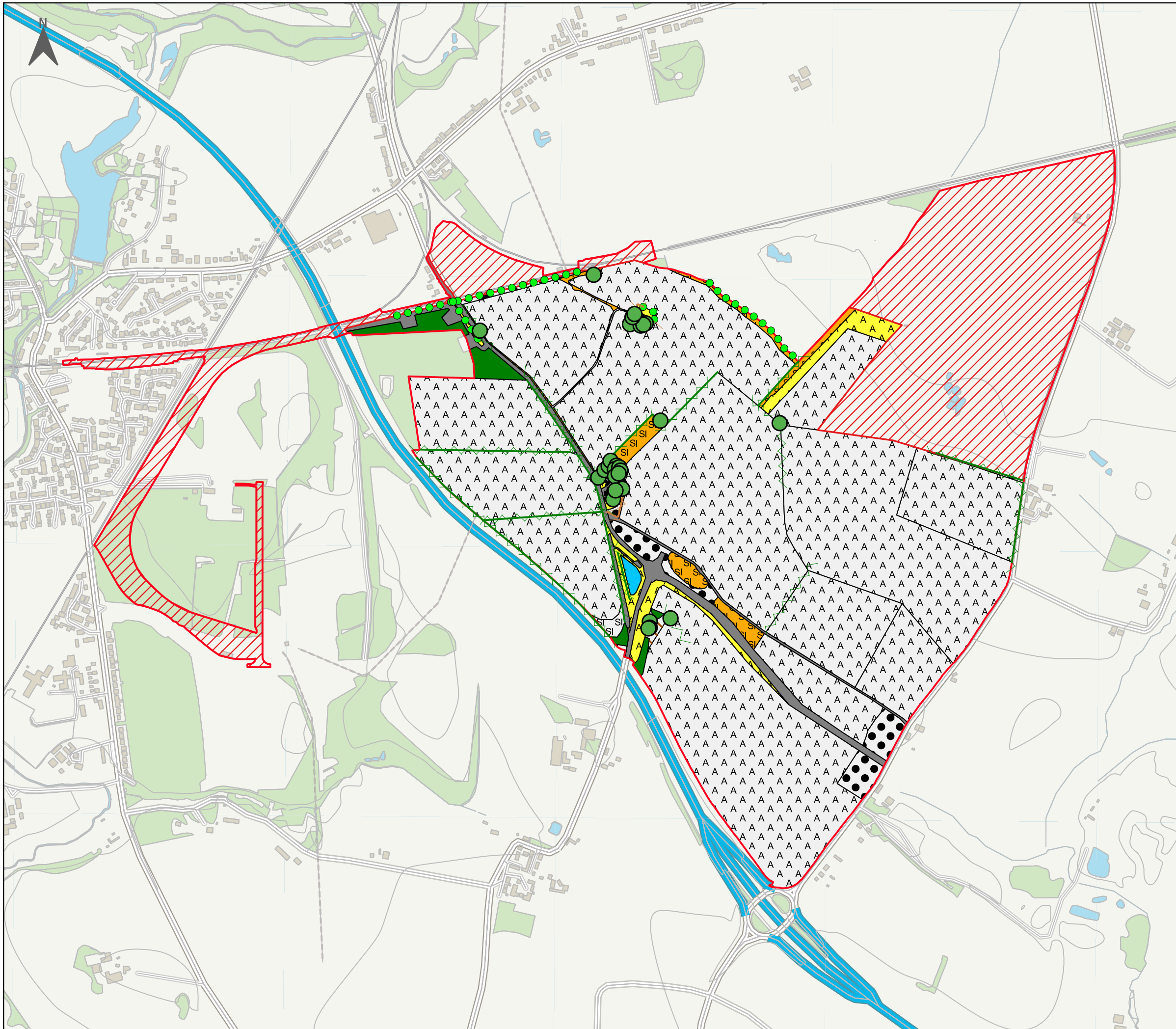


Visual Context Plan

APFP Regulation:	N/A
Document Ref:	N/A
Drawing Number:	Figure 9.2
Drawing Status:	FINAL
Revision:	P01
Drawn by:	SK
Approved by:	JM

NOTES:
 1. Zone of Theoretical Visibility has been generated using LiDAR Composite First Return 2022 1m digital surface model (DSM) data which takes account of the screening effects of vegetation, buildings and other structures.
 2. ZTV generation has allowed for the curvature of the earth and light refraction.
 3. ZTV has been generated based upon an observer eye height of 1.6m above ground level. ZTV has been generated based upon a proposed building height of 35m.

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Date: 01-11-2024
 Paper size: A3
 Scale: 1:10,000



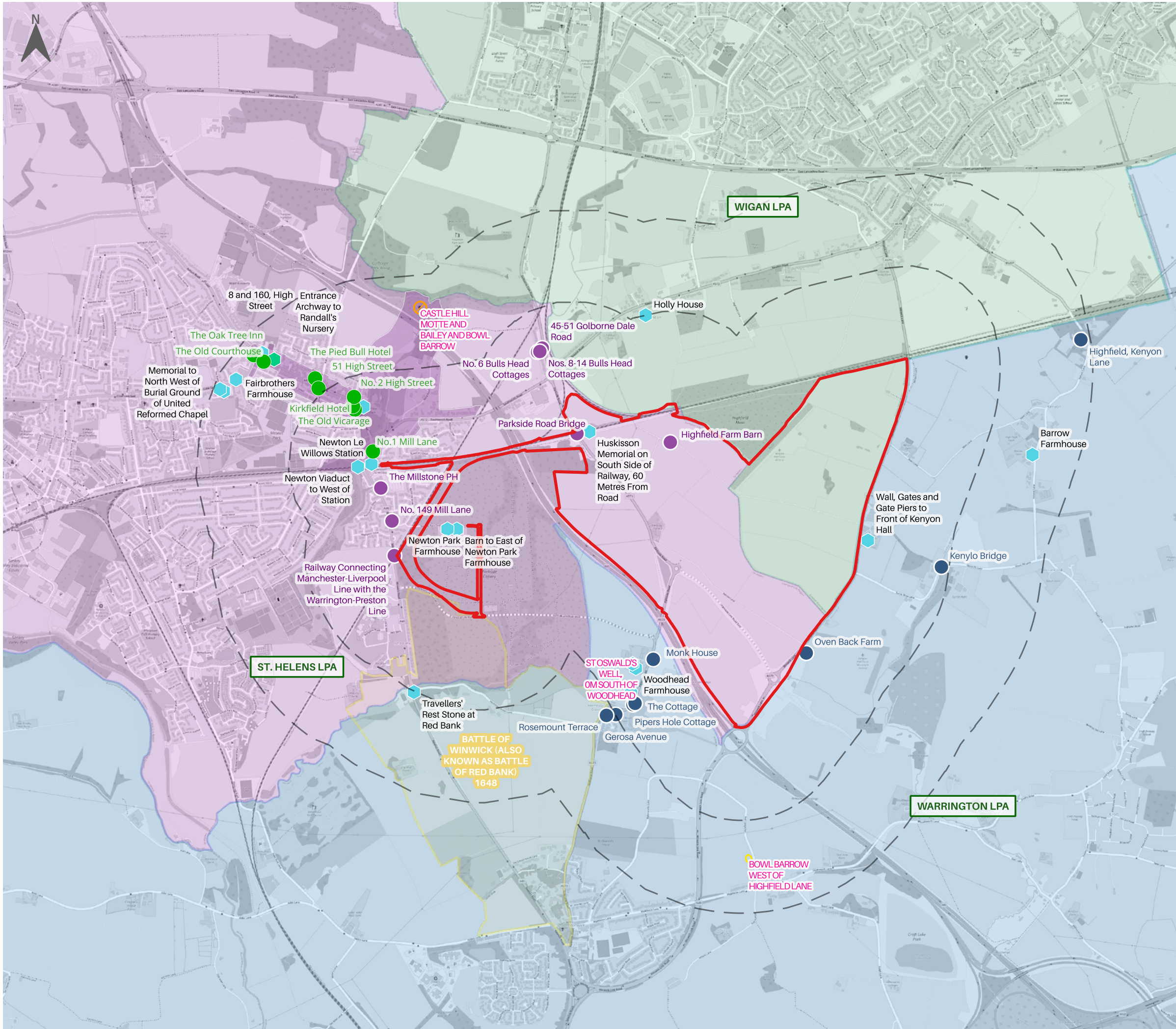
- Boundaries**
- Draft Order Limits
 - To be Included in 2025 Scope
- Baseline Habitats**
- Baseline - Point Habitats**
- Scattered Broad-leaved Tree
- Baseline - Line Habitats**
- Native Hedgerow
 - Defunct Native Hedgerow
 - Ornamental Hedgerow
 - Line of Trees
- Baseline - Polygon Habitats**
- Bare ground
 - Buildings
 - Cultivated/disturbed land - amenity grassland
 - Cultivated/disturbed land - arable
 - Hardstanding
 - Other tall herb and fern - ruderal
 - Poor semi-improved grassland
 - Neutral grassland - semi-improved
 - Scrub - dense/continuous
 - Broadleaved woodland - semi-natural
 - Standing Water



**Figure 10.1:
Habitat Features Plan**

APFP Regulation:	-
Document Ref:	-
Drawing Number:	10.1
Drawing Status:	Final
Revision:	2
Drawn by:	David P
Approved by:	Joseph D

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INTERMODAL LOGISTICS PARK (ILP) NORTH

Date: 10-10-2024

Paper size: A3

Scale: 1:20,000



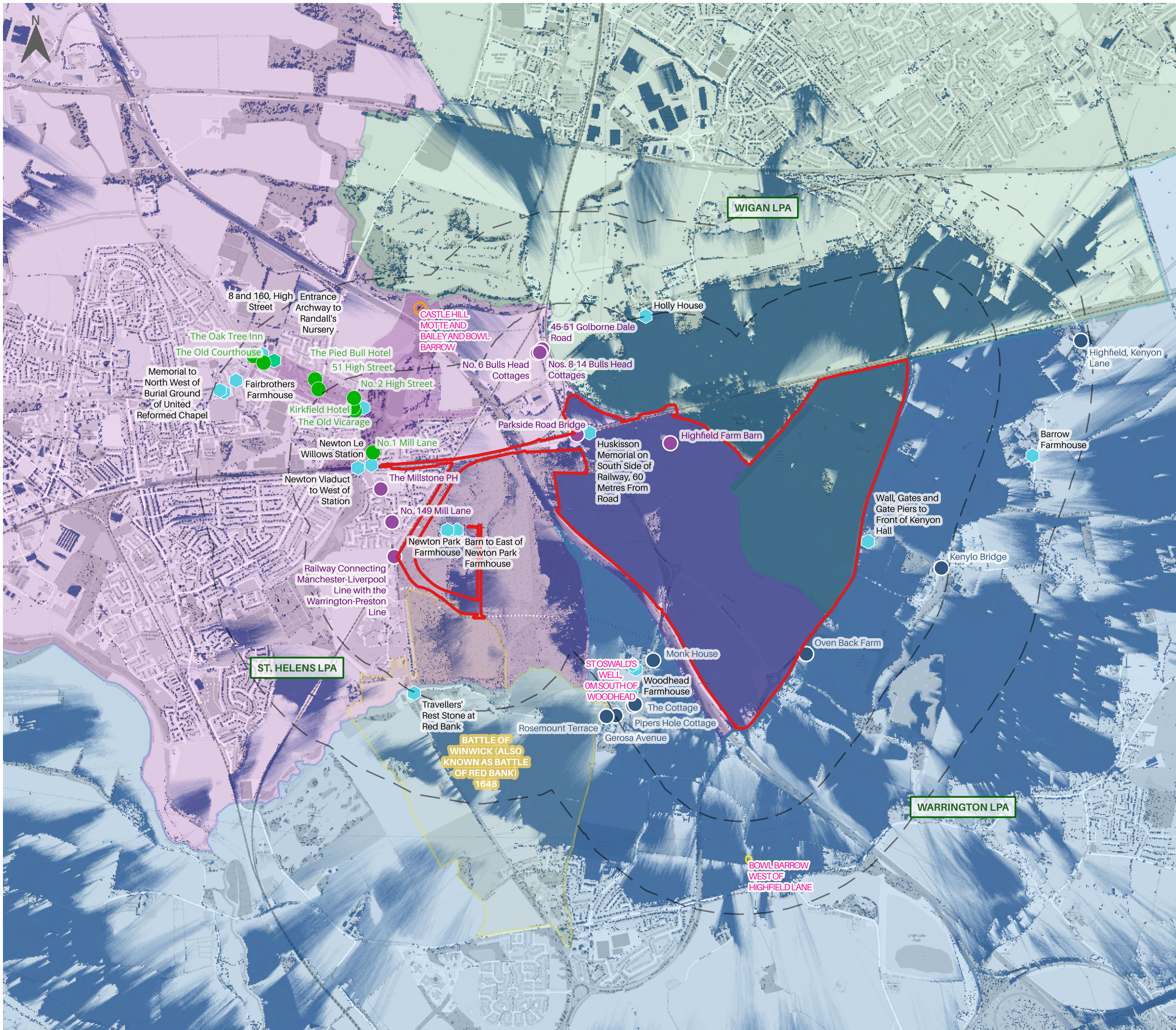
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- 1km Buffer
- 500m Buffer
- Designated Heritage Assets
 - ◆ Grade II
 - ◆ Grade II*
 - Protected Battlefields
 - CAs
- Non-Designated Heritage Assets
 - NDHAs
 - St Helens Locally Listed Buildings
 - Warrington Locally Listed Buildings
- Scheduled Monuments:
 - Bowl barrow west of Highfield Lane
 - Castle Hill motte and bailey and bowl barrow
 - St Oswald's Well 150m south of Woodhead
- LPA's
 - St. Helens LPA
 - Warrington LPA
 - Wigan LPA



Figure 11.1 Heritage Asset Map

APFP Regulation:	N/A
Document Ref:	N/A
Drawing Number:	11.1
Drawing Status:	FINAL
Revision:	V4
Drawn by:	G Mark
Approved by:	G Foy

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INTERMODAL LOGISTICS PARK (ILP) NORTH

Date: 10-10-2024
 Paper size: A3
 Scale: 1:20,000



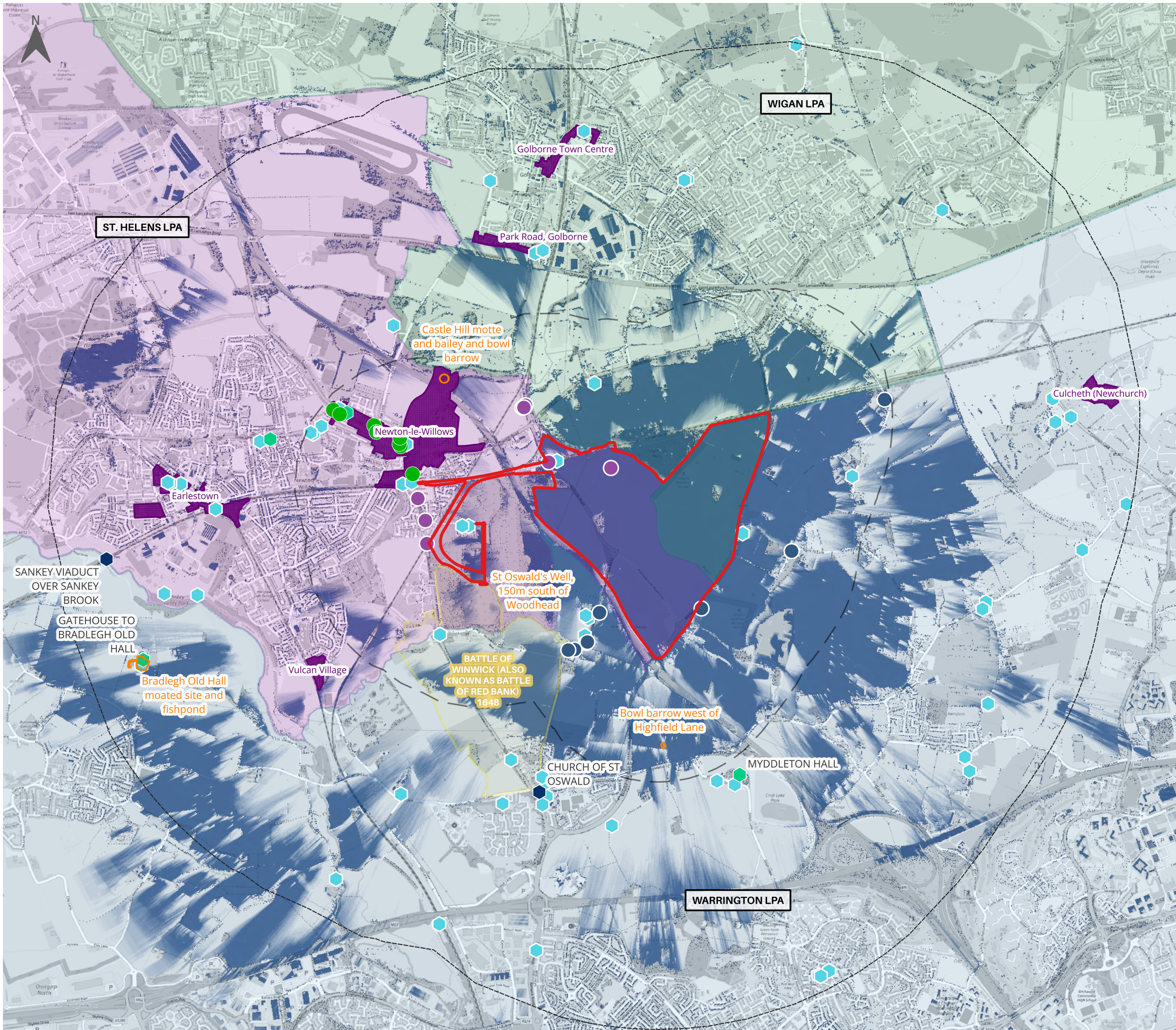
- Draft Order Limits
- 1km Buffer
- 500m Buffer
- Designated Heritage Assets**
- Grade II
- Grade II*
- Protected Battlefields
- CAs
- Non-Designated Heritage Assets**
- NDHAs
- St Helens Locally Listed Buildings
- Warrington Locally Listed Buildings
- Scheduled Monuments:**
- Bowl barrow west of Highfield Lane
- Castle Hill motte and bailey and bowl barrow
- St Oswald's Well 150m south of Woodhead
- LPAs**
- St. Helens LPA
- Warrington LPA
- Wigan LPA
- Zone of Theoretical Visibility**
- High Visibility
- Low Visibility



Figure 11.2 Heritage Asset Map with ZTV

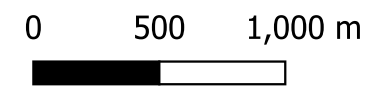
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Document Ref:	N/A
Drawing Number:	11.2
Drawing Status:	FINAL
Revision:	V4
Drawn by:	G Mark
Approved by:	G Foy

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Date: 28-10-2024
 Paper size: A3
 Scale: 1:30,000.000031



- Key:**
- Draft Order Limits
 - 1km Buffer
 - 3km buffer
- Designated Heritage Assets:**
- Grade I
 - Grade II*
 - Grade II
 - Protected Battlefields
 - Conservation Areas
 - Scheduled Monuments
- Non-Designated Heritage Assets:**
- NDHAs
 - St Helens Locally Listed Buildings
 - Warrington Locally Listed Buildings

- LPAs**
- St. Helens LPA
 - Warrington LPA
 - Wigan LPA

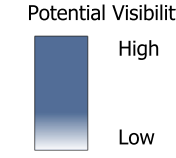
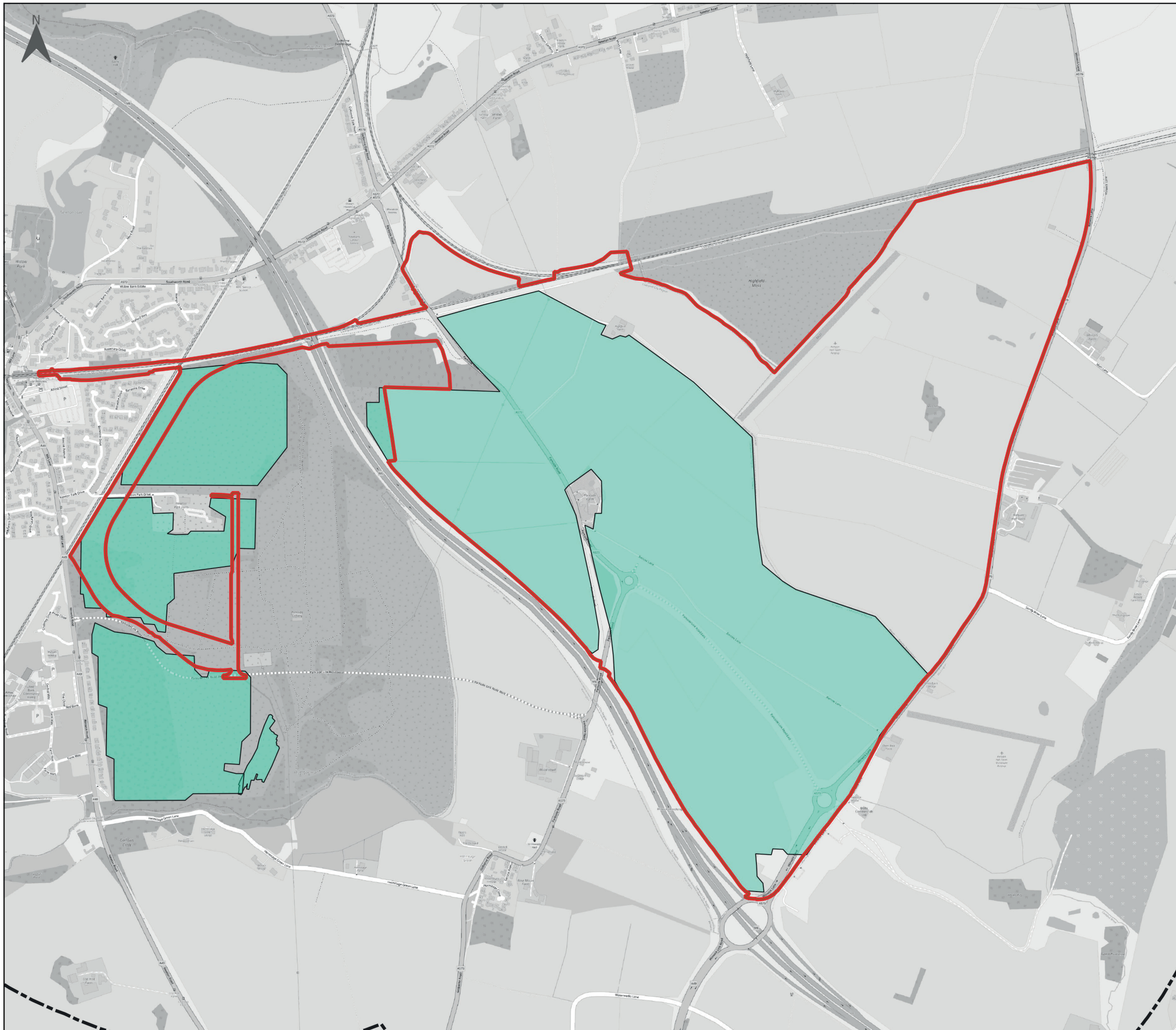


Figure 11.3 Heritage Asset Map with ZTV

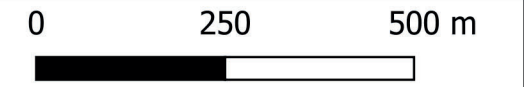
APFP Regulation:	N/A
Document Ref:	N/A
Drawing Number:	11.3
Drawing Status:	FINAL
Revision:	V4
Drawn by:	G Mark
Approved by:	G Foy

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INTERMODAL LOGISTICS PARK (ILP) NORTH

Date: 10-10-2024
 Paper size: A3
 Scale: 1:10,000



Key:

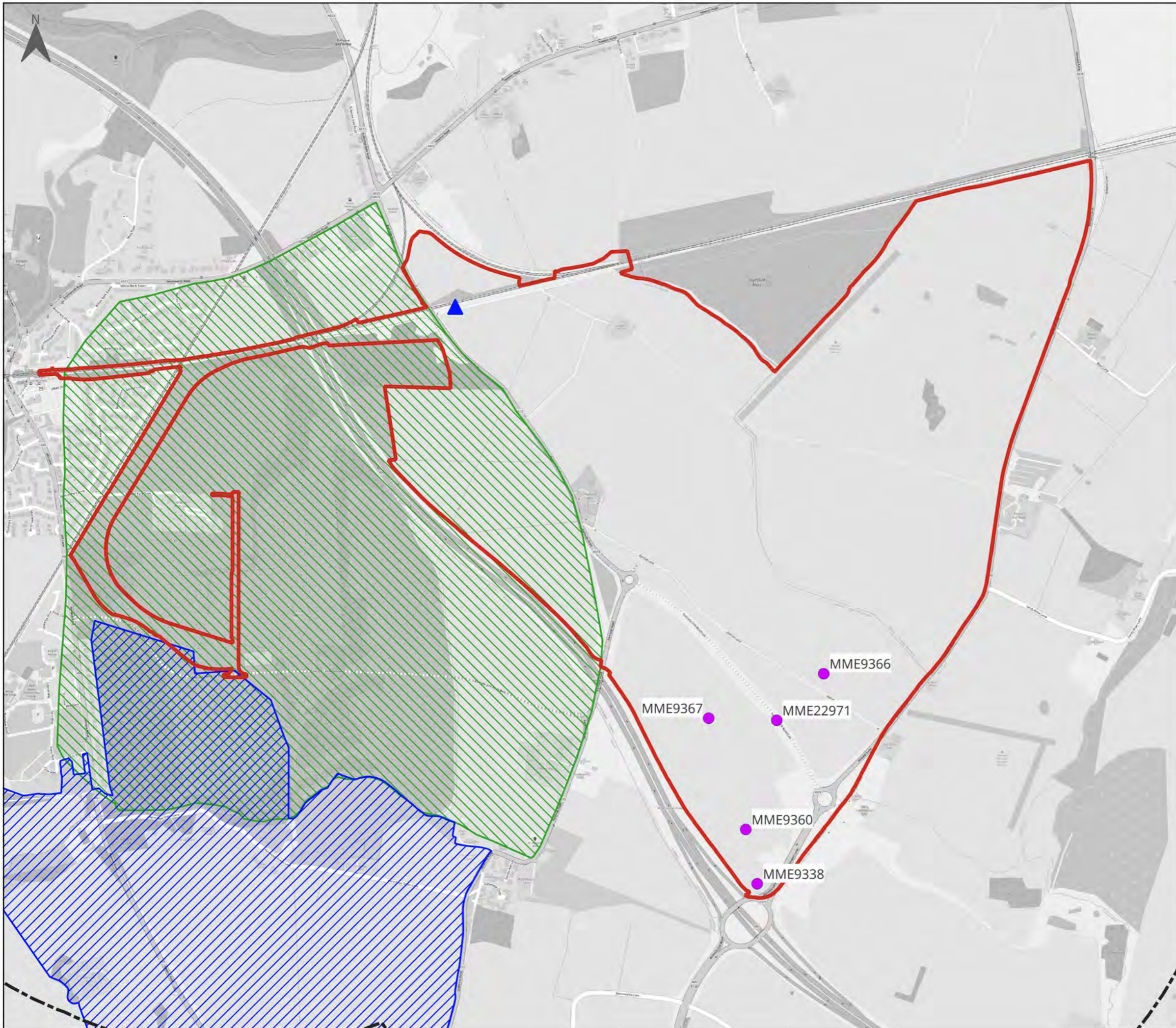
- 2007 Geophysical Survey
- 1km Study Area
- Draft Order Limits



Figure 12.1
2007 Geophysical Survey

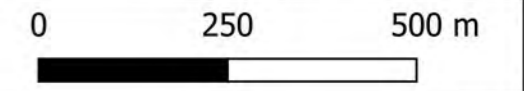
APFP Regulation:	N/A
Document Ref:	N/A
Drawing Number:	12.1
Drawing Status:	Draft
Revision:	01
Drawn by:	SR
Approved by:	SR

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Date: 10-10-2024
 Paper size: A3
 Scale: 1:10,000



Key:

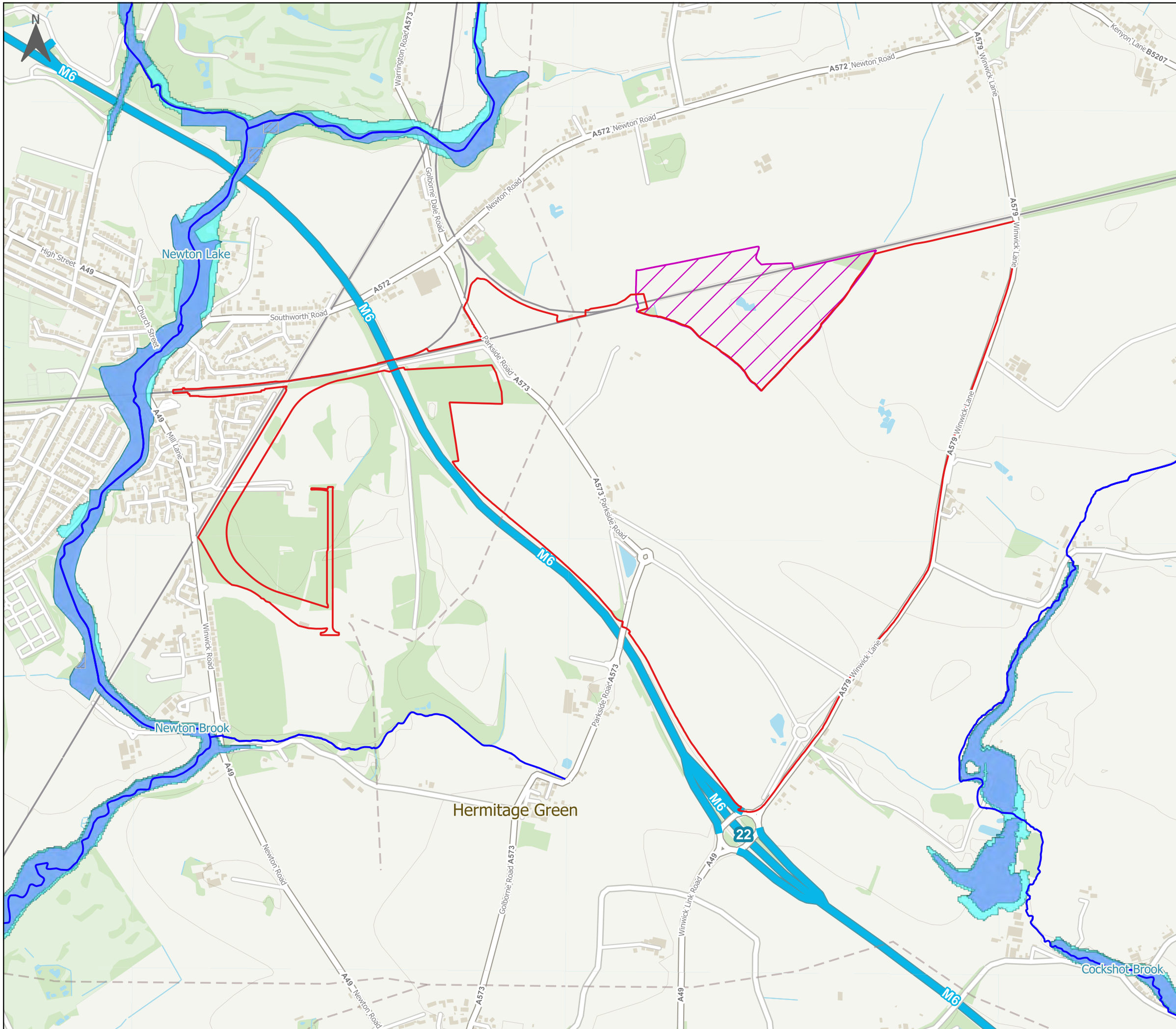
- Registered Battlefield (1412878)
- Listed Building (1075900)
- MHER Monument (MME9311)
- MHER Points
- 1km Study Area
- Draft Order Limits



Figure 12.2
Known Archaeological Receptors

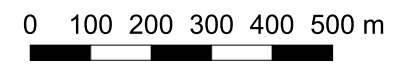
APFP Regulation:	N/A
Document Ref:	N/A
Drawing Number:	12.2
Drawing Status:	Draft
Revision:	01
Drawn by:	SR
Approved by:	SR

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INTERMODAL LOGISTICS PARK (ILP) NORTH

Date: 03-10-2024
 Paper size: A3
 Scale: 1:12,500



Key:

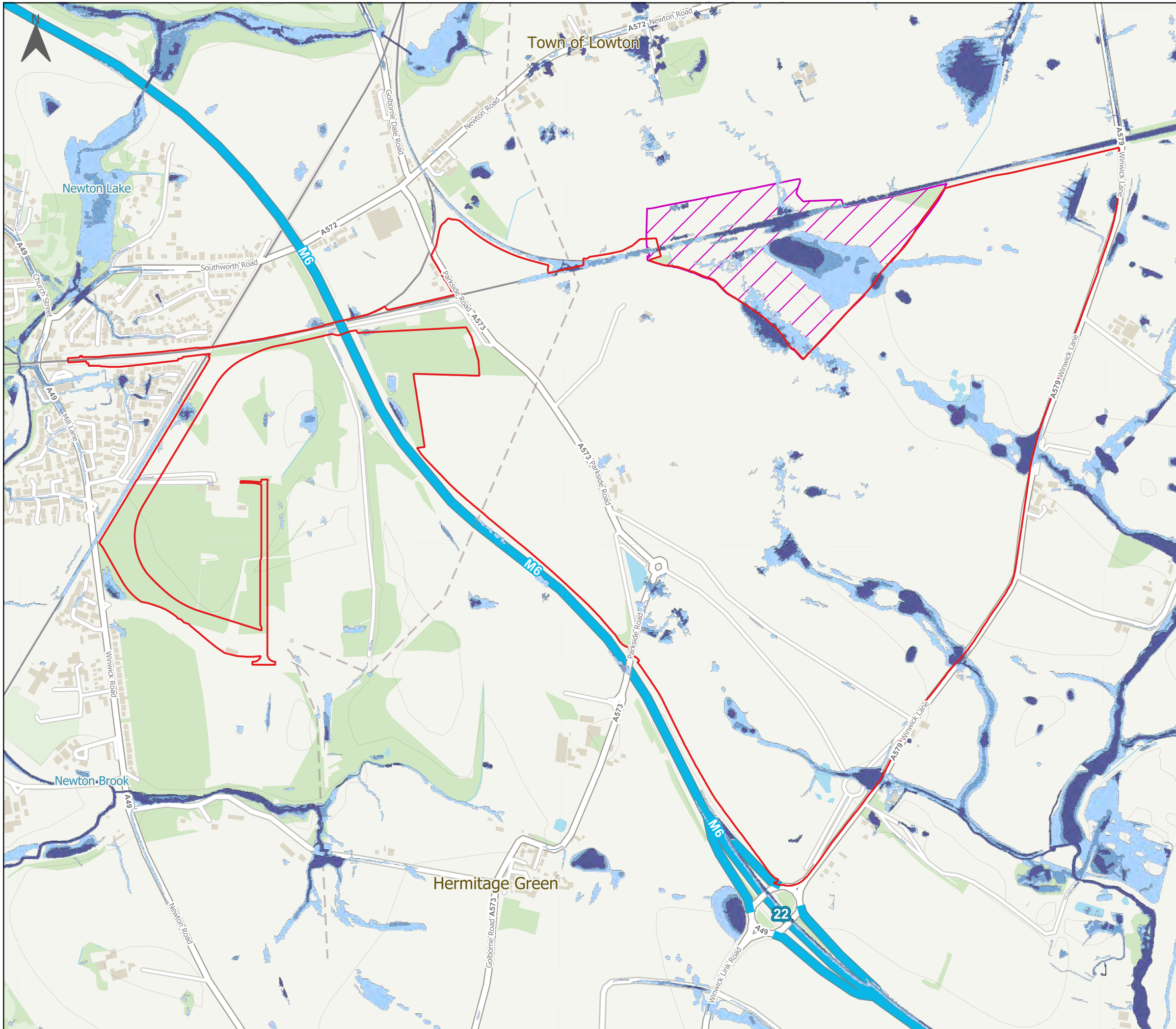
- Draft Order Limits
- Highfield Moss SSSI
- Main River
- Flood Zone 3
- Flood Zone 2



Figure 13.1: Environment Agency Flood Map for Planning

APFP Regulation:	N/A
Document Ref:	N/A
Drawing Number:	ILPN-BWB-ZZ-XX-D-W-0001
Drawing Status:	FINAL
Revision:	P01
Drawn by:	S. Renwick
Approved by:	C. Gardner

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INTERMODAL LOGISTICS PARK (ILP) NORTH

Date:	03-10-2024
Paper size:	A3
Scale:	1:10,000

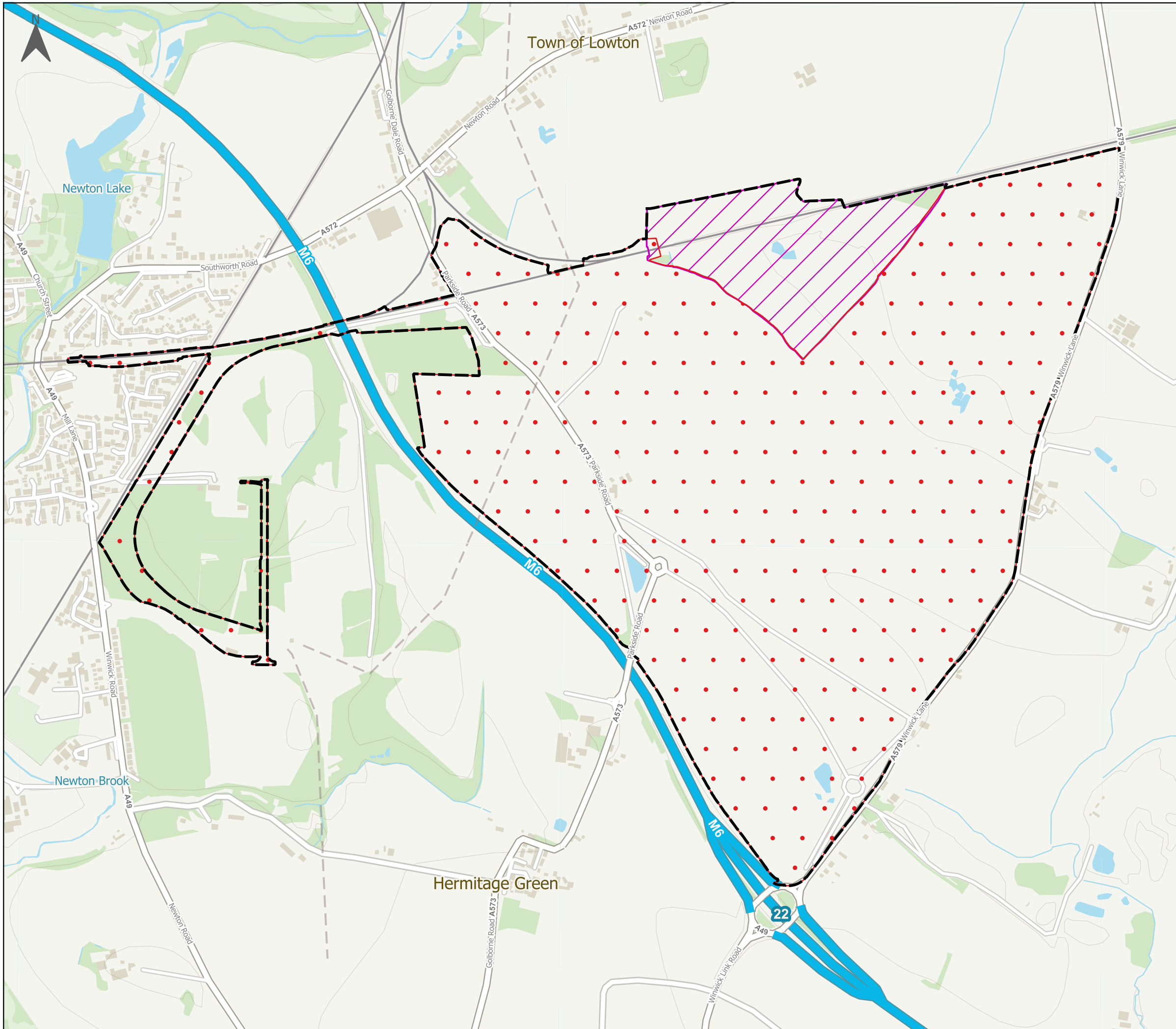
Key:

- Draft Order Limits
- Highfield Moss SSSI
- 1 in 30-Year (High Risk)
- 1 in 100-Year (Medium Risk)
- 1 in 1000-Year (Low Risk)

Figure 13.2: Environment Agency Risk of Flooding from Surface Water mapping

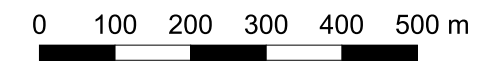
APFP Regulation:	N/A
Document Ref:	N/A
Drawing Number:	ILPN-BWB-ZZ-XX-D-W-0002
Drawing Status:	FINAL
Revision:	P02
Drawn by:	S. Renwick
Approved by:	C. Gardner

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INTERMODAL LOGISTICS PARK (ILP) NORTH

Date: 03-10-2024
 Paper size: A3
 Scale: 1:10,000



Key:




-  Draft Order Limits
-  Highfield Moss SSSI
-  Study Area



Figure 13.3: Study Area for Chapter 13 Hydrology

APFP Regulation:	N/A
Document Ref:	N/A
Drawing Number:	ILPN-BWB-ZZ-XX-D-W-0003
Drawing Status:	FINAL
Revision:	P02
Drawn by:	S. Renwick
Approved by:	C. Gardner

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