The Rail Central Rail Freight Interchange and Highway Order 201[x]

Draft Planning Statement for Phase 2 Consultation

Ashfield Land Management Limited and Gazeley GLP Northampton s.à.r.l.

Regulation: 5(2)(q)

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Turley
Planning

Contents

Glossary of Terms

A	
Air Quality Management Areas	An area formally designated by the local authority in which levels of air pollution are above specified levels known as “air quality objectives”.
Applicant	The applicant comprises a joint venture partnership between Ashfield Land Management Limited and Gazeley GLP Northampton s.à.r.l.
Ashfield Land	Ashfield Land Management Limited the joint Applicant in a joint venture partnership arrangement with Gazeley GLP Northampton s.à.r.l.
Assessment	An umbrella term used to encompass all the different ways of looking at, describing, analysing and evaluating landscape.
Attenuation pond/facility	Structure used to temporarily impound water.
B	
Baseline	Information which represents the environmental conditions immediately prior to the implementation of any scheme. Environmental impacts or benefits are assessed by measuring how much the baseline conditions would change.
Biodiversity	Biodiversity is a term to describe the variety of life on Earth. It refers to the wide variety of ecosystems and living organisms: animals, plants, their habitats and their genes.
Biomass	Fuel that is developed from organic materials, a renewable and sustainable source of energy used to create electricity or other forms of power
Brownfield	Land previously used for industrial and commercial facilities available for reuse.
Bunds	Man-made mound, usually intended to provide a visual screen, often in conjunction with planting.
C	
Contaminated land	Land that is in such a condition that either significant harm is being caused or there is a significant possibility of such harm being caused, or pollution of controlled waters is being or is likely to be caused.
Container	Standard and common form of shipping goods

	within the UK and internationally. Containers can be moved easily and efficiently from road and /or rail to ship, and vice versa as part of international Distribution networks and market supply chains
Controlled Waters	Any coastal waters, inland fresh waters, ground waters or relevant territorial waters (up to three miles seawards).
Cumulative Effects	Effects which arise from a combination or interaction of effects at a specific location.
D	
dB (A)	Sound levels measured in decibels, calculated by a method ("A-weighted") that takes particular account of the frequencies most significant in traffic-generated noise.
Deciduous (trees)	Shed leaves annually.
Designated heritage asset	World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area.
Development Consent Order (DCO)	The means of obtaining permission for developments categorised as Nationally Significant Infrastructure Projects (NSIP). This includes energy, transport, water and waste projects.
Development Plan	A development plan sets out the policies and proposals for the development, conservation and use of land and buildings in a particular local planning authority area. The development plan is the most important consideration for local planning authorities when they decide on a planning application.
Direct Effect	An effect that is directly attributable to the Proposed Development.
Discharge	Release of water into surface waters, groundwater, or drainage/sewer systems.
Distribution/ Distribution Sector	The management of the flow of resources (such as components, products, or raw materials) between the point of origin and the point of consumption, both within the UK and internationally. This includes the movement of goods as part of a supply chain, which includes relationships and movements involving retailers and end-consumers, including the public, as well as often complex networks between manufacturers and

	often multiple suppliers.
DMRB	The Department of Transport's Design Manual of Roads and Bridges, a multi-volume work that gives guidance on all matters relating to highway construction. Volume 11 related to Environmental Impact Assessment and provides methodologies for assessment that can be used for many different types of development.
DNO Good Practice	Guidance document to outline best practice approach on queue management connection milestones for Distribution Network Operators (DNO).
E	
Earthworks	In construction, this means any operations involved in moving, loosening, depositing, shaping, compacting and stabilising soil and rock. In archaeology, it means any archaeological features that are visible as slopes, mounds, banks or depressions in the ground surface.
Effects	Change experienced by a receptor.
Elements	Individual parts which make up the landscape, such as, for example trees and buildings.
Environmental Impact Assessment	A formal process which assesses the potential environmental effects of a project.
Environmental Statement	Document in which the results of an EIA are presented to decision-makers and the public.
Embankment	An elongated mound of material deliberately placed to form a raised area, sometimes built to elevate a railway above the surrounding ground.
F	
Feature	Particularly prominent or eye-catching elements in the landscape, such as tree clumps, church towers or wooded skylines OR a particular aspect of the project proposal.
Floodplain	Flat or nearly flat land adjacent a stream or river that stretches from the banks of its channel to the base of the enclosing valley walls and experiences flooding during periods of high discharge.
Fluvial	The processes associated with rivers and streams and the deposits and landforms created by them.
Foul sewers	Sewers that collect foul water (sewage and trade effluent) and convey the flow to a treatment

	facility.
G	
Gantry	Overhead frame from which various structures can be mounted.
Gazeley GLP	Gazeley GLP Northampton s.à.r.l. the joint Applicant in a joint venture partnership arrangement with Ashfield Land Management Limited.
Green Belt	Areas of Green Belt are regions of principally open countryside surrounding existing built-up areas, the purpose of which is to check the unrestricted sprawl of these built-up areas and to safeguard the surrounding countryside against further encroachment.
Green Infrastructure	A network of multi-functional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities. This can include landscaping areas containing planting, open spaces, walkways and green links (including those intended to support habitat creation or retention to support biodiversity).
Groundwater	Water below the surface of the ground in the saturation zone, below the water table.
H	
Heritage asset	Building, monument, site, place, area or landscape positively identified as having a degree of significance meriting consideration in planning decisions.
HGV	Heavy Goods Vehicle, vehicle over 7.5 tonnes Gross Vehicle Weight
Historic environment	All those material remains that our ancestors have created in the landscapes of town and countryside. It covers the whole spectrum of human activity from the largest – towns, cathedrals or motorways, to the very smallest – signposts, standing stones or flint tools.
Historic Environment Record	A series of linked computer databases that hold information on known archaeological sites, finds, landscapes, buildings and other aspects of the historic environment.
Hydrology	The study of surface water.

Hydrogeology	The study of groundwater.
I	
Impact	An action which causes an effect to be experienced by a receptor.
Indirect Effects	Effects that result indirectly from the Proposed Development as a consequence of the direct effects, often occurring away from the site, or as a result of a sequence of interrelationships or a complex pathway. They may be separated by distance or in time from the source of the effects.
Inter-project	Occurring between the Scheme and other projects.
Intra-project	Occurring within the Scheme.
K	
Key Characteristics	Those combinations of elements which are particularly important to the current character of the landscape and help to give an area its particularly distinctive sense of place.
L	
Landscape	Human perception of the land conditioned by knowledge and identity with a place.
Landscape Character Assessment	The process of systematic description, classification and analysis of landscape, in order to identify, describe and understand its character. The scale and detail of the assessment will depend upon the purpose for which it is being undertaken.
Landscape Character	The distinct and recognisable pattern of elements that occurs consistently in a particular type of landscape, and how this is perceived by people. It reflects particular combinations of geology, landform, soils, vegetation, land use and human settlement. It creates the particular sense of place of different areas of landscape.
Landscape Character Area	Single unique areas that are the discrete geographical areas of a particular landscape type. Each has its own individual character and identity, even though it may share the same generic characteristics with other areas of the same landscape character type.
Land Cover	The surface cover of the land usually expressed in terms of vegetation cover or lack of it. Related to but not the same as land use.

Landscape Element	A component part of the landscape (e.g. roads, hedges, woods).
Landscape and Visual Impact Assessment (LVIA)	A tool used to identify and assess the likely significance of the effects of change resulting from development both on the landscape as an environmental resource in its own right and on people's views and visual amenity.
Landscape Effects	Change in the elements, characteristics, character and qualities of the landscape as a result of development. These effects can be positive or negative.
Landscape Feature	A prominent eye-catching element, for example, wooded hilltop or church spire.
Landscape Sensitivity	Relates to the ability of a landscape to accept change within alteration of the defining characteristics of that landscape.
Landscape Value	The relative value or importance attached to a landscape (often as a basis for designation or recognition), which expresses national or local consensus, potentially attributable to its special qualities including perceptual aspects such as scenic beauty, tranquillity or wildness, cultural associations or other conservation issues.
Local Planning Authority (LPA)	The local authority or council that is empowered by law to exercise statutory town planning functions for a particular area of the United Kingdom
Logistics	The management of the flow of resources (such as components, products, or raw materials) between the point of origin and the point of consumption, both within the UK and internationally.
M	
Made Ground	An area of land that has been man-made, generally through the reclamation of marshes, lakes, or shorelines
Magnitude	A combination of the scale, extent and duration of an effect.
Main SRFI Site	The area within the order limits where the majority of the proposed development will be located, i.e. to the north of the WCML, west of the NLL, South of Milton Malsor and east of the A43.
Masterplan	Indicative plan for entire development area marking out core infrastructure and areas for

	infrastructure and buildings, to be delivered over a period of time.
Methodology	The specific approach and techniques used for a given study.
Mitigation	Measures, including any process, activity or design to avoid, reduce, remedy or compensate for adverse effects of a development project.
N	
National Networks National Policy Statement (NPS)	A document that 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.
National Planning Policy Framework (NPPF)	National government planning policy. A material consideration in the determination of Development Consent Order applications
National Planning Policy Guidance (NPPG)	Detailed guidance for the implementation of policies set out in the NPPF.
Nationally Significant Infrastructure Project (NSIP)	A project of a type and scale defined under the Planning Act 2008 and by order of the Secretary of State relating to energy, transport, water, waste water and waste generally. These projects require a single development consent.
No Significant Effects	An effect below the threshold of significance, usually taken to be less than an effect of medium significance.
O	
Operational Effects	Effects that occur during the operational phase. These can be temporary or permanent.
Order Limits	The boundary within which the proposed DCO works will be located.
P	
Pathway	A route or means by which a receptor could be, or is exposed to, or affected by a contaminant.
The Planning Inspectorate (PINS)	An executive agency of the Department for Housing, 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	A change in the physical, chemical, radiological or biological quality of a resource (air, water or land)

	caused by people or their activities that is injurious to existing, intended or potential uses of the resource.
Proposed Development Area (PDA)	The land within the order limits where development will be located, including the main SRFI site, the Junction 15a works and the other minor highways works.
Public Right of Way	A path that members of the public have a protected legal right to walk along. Depending on the type of public right of way, it may also be available for cycling, horse riding, horse drawn carriages and motor vehicles.
Q	
Qualitative	Qualities or characteristics that cannot be measured numerically.
Quantitative	Measurement based on data.
R	
Receptor	In general terms, something that could be adversely affected by a contaminant, such as people, an ecological system, property or a water body.
Residual Effect	An environmental effect that remains, or is predicted to remain, even after mitigation measures have been applied.
Ridge and furrow	An archaeological pattern of ridges and troughs created by a system of ploughing used in Europe during the Middle Ages, typical of the open field system.
S	
The Scheme	The proposed DCO works within the boundary of the order limits, the 'Rail Central Project'.
Scoping Opinion	A formal written opinion on the information to be included in the Environmental Statement received from the Secretary of State
Scoping Report	The written request for a Scoping Opinion provided by the Applicant to the Secretary of State
Sensitivity	The degree of response of a receiver or instrument to a signal or a change.
Significance	The extent to which something matters. Significance of effects is defined as substantial, moderate, minor or negligible.

Source	A substance that is in, on or under the land that has the potential to cause harm or to cause pollution of controlled waters.
Stakeholder	Individuals, groups or organisations with an interest in the evaluated intervention or in the evaluation itself, particularly: authorities who decided on and financed the intervention, managers, operators, and spokespersons of the publics concerned. These immediate or key stakeholders have interests which should be taken into account in an evaluation. They may also have purely private or special interests which are not legitimately part of the evaluation. The notion of stakeholders can include the funding authorities/managers, the new hoteliers (direct beneficiaries), other professionals in tourism, former hoteliers facing competition from the assisted hotels, tourists, nature conservation associations and building contractors.
Strategic Rail Freight Interchange (SRFI)	A large multi-purpose rail freight interchange and distribution centre linked into both the rail and strategic road network. It includes rail-connected warehousing and container handling facilities and may also include manufacturing and processing activities.
Surface water runoff	Precipitation which travels to watercourses over the surface of the land.
Sustainability	Meeting or exceeding the needs of the present without compromising the ability of future generations to meet or exceed their own needs.
Swale	Low strip of land often moist and/or marshy.
T	
Topography	Description of the shape and physical features of the earth's surface.
Traffic generation	The amount of traffic that is created by a new activity.
Traffic Management Plan	An agreed plan to manage traffic during construction.
Train	One or more rail vehicles which are coupled together to form a single operating unit.
Transport Assessment	A formal assessment of the transport implications of a development which is published as a report. For more information see the Department for

	Transport's Guidance on transport assessment (2007).
Trunk Road	The national strategic road network, operated and maintained by Highways England, consisting principally of the motorways and major A roads.
V	
Visual Amenity	The overall pleasantness of the views people enjoy of their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through an area.
Visual Effect	Change in the appearance of the landscape as a result of development. This can be positive or negative.
W	
Wagon	Heavy Vehicle.
Water Framework Directive	A European Law which aims to improve water environments such as lakes and rivers.
Watercourse	A channel in which water flows.
WebTAG	The DfT's website for guidance on the conduct of transport studies. The guidance includes or provides links to advice on how to: • Set objectives and identify problems; • Develop potential solutions; • Create a transport model for the appraisal of the alternative solutions; and • How to conduct an appraisal which meets the Department's requirements.
Z	
Zone of Influence	Area within which a proposed development may have an influence or effect.

Acronyms

A	
ALC	Agricultural Land Classification
AoS	Appraisal of Sustainability
ASA	Alternative Sites Assessment
ASNW	Ancient Semi-Natural Woodland
B	
BMW	Best and Most Versatile (Agricultural Land)
C	
CAA	Civil Aviation Authority
CAAP	Central Area Action Plan
CEMP	Construction Environment Management Plan
CPNI	Centre for the Protection of National Infrastructure
D	
DAS	Design and Access Statement
DCLG	Department for Communities and Local Government
DCO	Development Consent Order
DETR	Department of the Environment, Transport and the Regions
DIRFT	Daventry International Rail Freight Terminal
DM	Do Minimum' Scenario
DMRB	Design Manual for Roads and Bridges
DoE	Department of Environment
E	
EA	Environment Agency
EIA	Environmental Impact Assessment
EMG	East Midlands Gateway
EMIP	East Midlands Intermodal Park
EMS	Environmental Management System
EPS	European Protected Species
ES	Environmental Statement

ExA	Examining Authority
F	
FOCs	Freight Operating Company
FRA	Flood Risk Assessment
FTE	Full Time Equivalent
FTP	Framework Travel Plan
G	
GBFM	Great Britain Freight Model
GEA	Gross External Area
GHG	Greenhouse Gas
GIS	Geographical Information System
GLP	Global Logistics Properties
GVA	Gross Value Added
H	
HER	Historic Environment Record
HGV	Heavy Goods Vehicles
HOOB	High Output Operating Base
HRA	Habitat Regulations Assessment
I	
IEEM	Chartered Institute of Ecology and Environmental Management
IEMA	Institute of Environmental Management and Assessment
L	
LEP	Local Economic Partnership
LEIS	Landscape Ecological and Infrastructure Strategy
LGS	Local Geological Site
LIR	Local Impact Report
LNR	Local Nature Reserves
LONI	Letter of No Impediment
LWS	Local Wildlife Sites
M	
MDS	Market Demand Statement

MOD	Ministry of Defence
MWLP	Northamptonshire Minerals and Waste Local Plan
N	
NATS	National Air Traffic Services
NBC	Northampton Borough Council
NCC	Northampton County Council
NHLE	National Heritage List for England
NLL	Northampton Loop Line
NPPF	National Planning Policy Framework
NPS	National Policy Statement for National Networks
NSIP	Nationally Significant Infrastructure Project
NSR	Noise Sensitive Receptor
O	
ODPM	Office of the Deputy Prime Minister
ORR	Office of Rail Regulation
P	
PA2008	Planning Act 2008
PAWS	Planted Ancient Woodland
PEIR	Preliminary Environmental Information Report
PINS	The Planning Inspectorate
PP	Pocket Parks
PPE	Personal Protective Equipment
PPG	Planning Practice Guidance
PPMS	Pollution Prevention Method Statement
PROW	Public Rights of Way
pWS	Potential Wildlife Sites
PWV	Protected Wildflower Verges
R	
RCC	Railway Control Centre
RFI	Rail Freight Interchange
RMS	Remediation Method Statement
RPE	Respiratory Protective Equipment

S	
SAC	Special Areas of Conservation
SFN	Strategic Freight Network
SNC	South Northamptonshire Council
SoCC	Statement of Community Consultation
SoS	Secretary of State
SPA	Special Protection Area
SPDs	Supplementary Planning Documents
SPG	Supplementary Planning Guidance
sqm	Square metres
sqft	Square feet
SRFI	Strategic Rail Freight Interchange
SRN	Strategic Rail Network
SSSI	Sites of Special Scientific Interest
SuDS	Sustainable Urban Drainage Systems
T	
TA	Transport Assessment
the Act	the Planning Act 2008
TEN-T	Trans-European Network
TPO	Tree Preservation Order
U	
UXO	Unexploded Ordinance
W	
WCML	West Coast Mainline
WSI	Written Scheme of Investigation
WTR	Wildlife Trust Reserves

1. Introduction

1.1 This report has been prepared to set out the Applicant's case on the key matters which are relevant to the determination of the application for a Development Consent Order (DCO) for the Nationally Significant Infrastructure Project (NSIP) of the Rail Central Project.

1.2 This draft Planning Statement will form the basis of the final Planning Statement to accompany the DCO application, following Phase 2 Consultation and considers the factors which should influence the recommendations of the Examining Authority (ExA), including the relevant decision making framework, national policies and any other factors which the ExA is expected to take into account as part of the examination of the application.

1.3 This report should be read in conjunction with the other submitted documents, most notably including the Preliminary Environmental Information Report (PEIR), which provide a more detailed account of the land required, the works for which consent will be sought, and the effects of those works on the environment.

The Applicant

1.4 The applicant for this DCO is Ashfield Land Management Limited and Gazeley GLP Northampton s.à.r.l., which comprises a joint venture partnership arrangement between Ashfield Land Management Limited and Gazeley GLP.

1.5 Ashfield Land is a property development and investment company active in all sectors of the commercial property market throughout the UK.

1.6 The joint venture partner is Gazeley, a Global Logistics Properties (GLP) company. Gazeley is a leading developer, investor and manager of European logistics warehouses and distribution parks with a 17 million square foot portfolio concentrated in the strategic logistics markets of the UK, Germany, France and the Netherlands. In addition to its operating portfolio, which is 98% leased to blue chip customers such as Amazon, UPS and Volkswagen, Gazeley has a prime land bank which allows for the development of an additional 16 million square feet.

Project Background

1.7 The Applicant intends to make an application to the Secretary of State (SoS) via the Planning Inspectorate (PINS) for a DCO under the Planning Act 2008 (PA2008) for the development of a new Strategic Rail Freight Interchange (SRFI) (which includes warehousing) on land at Arm Farm, Milton Malsor, Northamptonshire.

1.8 A SRFI is a large multi-purpose rail freight interchange and distribution centre linked into both the rail and strategic road network. It includes rail-connected warehousing and container handling facilities and may also include manufacturing and processing activities. The aim of a SRFI is to optimise the use of rail in the freight journey by maximising rail trunk haul and minimising some elements of the secondary distribution leg (final delivery) by road, through co-location of other distribution and freight

activities. SRFIs are a key element in reducing the cost to users of moving freight by rail and are important in facilitating the transfer of freight from road to rail, thereby reducing trip mileage of freight movements on both the national and local road networks.

1.9 In light of the economic and environmental benefits, which the use of rail can bring to the movement of freight, it is government policy to deliver a national network of SRFI across the country. However, there are a relatively small number of operational SRFI in comparison to road-served distribution parks and to satisfy market demand and satisfactorily accommodate the anticipated increase in domestic and international rail freight in the most appropriate way, a need exists for more rail served warehousing space. The existing SRFI will only have a finite capacity to expand floorspace and/or rail freight interchange facilities, such that further sites, including Rail Central, are needed to increase both the capacity and the wider network, bringing rail access closer to more local companies than is possible from the existing sites alone.

1.10 With its geographic position – situated on one of the most important strategic corridors for freight transport within Great Britain – both in terms of the strategic highway network and strategic freight network – Rail Central is one of the best performing SRFI opportunities available and it is anticipated that rail traffic will reflect a blend of the following sectors:

- Deep-sea intermodal services across a network of major port facilities (e.g. Felixstowe, Southampton, London Gateway, Tilbury, Purfleet, Seaforth, Bristol, Teeside and Grangemouth);
- Domestic intermodal services with the site being well placed on the national freight corridor within Great Britain;
- European and longer distance intermodal services (particularly to and from China);
- Domestic and European conventional wagon services; and
- Domestic and European express freight services.

1.11 The delivery of Rail Central will therefore help to ensure greater opportunities to achieve a significant “modal shift” of long-distance freight from road to rail, with the associated environmental benefits, over the medium to long term. This site is therefore targeting a medium to longer term provision of space to ensure continuity of supply.

1.12 The DCO application includes associated development and also includes associated highway works. A specific element of those highways works relating to Junction 15a of the M1 motorway (J15a) constitutes a NSIP in its own right. Where a scheme involves development which meets the criteria for more than one type of NSIP, then such a scheme can be pursued in a single application for a DCO. For completeness it has therefore been determined that there are two NSIPs forming the Proposed Development, namely:

- The Main SRFI Site; and
- Works to J15a of the M1

1.13 The elements of the Proposed Development that are not encompassed within either NSIP will be characterised within the draft DCO as associated development. For the purposes of this draft Planning Statement and the PEIR and the final application for DCO consent, the two NSIPs and associated development are assessed as a single project. In other words, we do not distinguish between the two NSIPs and their associated development. Indeed, it is considered it would be difficult to do so given that the SRFI, highway works and associated development are clearly interconnected and linked. The Order Limits therefore include the two NSIPs and associated development.

The Decision Making Framework

1.14 Under Section 104 of the PA2008, an application for a NSIP must be determined in accordance with the relevant National Policy Statement, except in limited specific circumstances[1].

1.15 The National Planning Policy Statement for National Networks (December 2014) (the NPS) provides the primary basis for the consideration of a nationally significant SRFI and highway works on the national network. The NPS provides a bespoke policy framework for the infrastructure which is necessary to meet identified national needs. It contains detailed guidance, on a topic by topic basis, to guide both applicants and the decision maker in their detailed approach to NSIPs – in respect of their function, design, assessment and mitigation.

1.16 The NPS sets out matters which the decision maker is required to consider. The acceptability of the Proposed Development in this policy context is considered in Sections 9 to 27 of this draft Planning Statement, with Section 28 drawing overall conclusions about the compliance of the Proposed Development with the NPS.

Proposed Development

1.17 The development proposed by this Application is for a new SRFI (NSIP 1), works at J15a (NSIP 2) and associated development. The proposals for the SRFI constitute a NSIP under the criteria provided by Sections 14(1) (l) and 26 of the PA2008.

1.18 Section 2 of this statement provides a context of where the site is located. Furthermore, it also provides a detailed breakdown of the site description for the Main SRFI site (NSIP 1), the J15a site (NSIP 2) and the other associated development sites. Set out below is a summary of the Proposed Development, a more detailed description can be found within Section 4 of this statement.

1.19 The Proposed Development comprises the following aspects:

- The 'Main SRFI Site' (including the A43 access and all rail infrastructure);
- Works to J15A of the M1 motorway; and
- Other highway works.

[1] Section 104(2), Planning Act 2008

1.20 The Proposed Development comprises the following principal elements:

The 'Main SRFI Site'

- Demolition of existing buildings and structures;
- An intermodal freight terminal with direct connections to the Northampton Loop Line, capable of accommodating trains of up to 775m long, including up to 3 gantry cranes, container storage, a train maintenance depot and facilities to transfer containers to Heavy Goods Vehicles (HGV);
- An express freight terminal with direct connections to the West Coast Main Line, capable of accommodating trains of up to 240m long, a freight platform with associated loading and unloading facilities;
- Up to 702,097 square metres (sqm) (GEA) of rail connected and rail served warehousing and ancillary service buildings including a lorry park, terminal control building and bus terminal;
- New road infrastructure including a new separated access point on the A34 (T), an internal site underpass (under Northampton Road) and necessary utilities infrastructure; and
- Strategic landscaping and open space including alterations to public rights of way, the creation of new ecological enhancement areas and publicly accessible open areas, flood attenuation, and the partial diversion of the Milton Malsor brook.

1.21 A series of key parameters, which provide certainty over the Proposed Development at the main site, are provided in draft Parameters Plans submitted alongside this Phase 2 Consultation. As part of the DCO application, these parameters will be fixed. Furthermore, an Illustrative Masterplan demonstrates a means of bringing forward the Proposed Development, whilst being in accordance with the proposed parameters.

Works to J15a of the M1

1.22 Improvements to J15a of the M1, including carriageway widening, reconfiguration and signalisation to the highway and the provision of ecological mitigation to the south-west of J15a to partly mitigate habitat loss at the Main SRFI Site and landscaping around the junction.

1.23 Parameters for the works are shown on the J15a Green Infrastructure Plan, which shows the extent of the highway works and ecological mitigation proposed.

Other Highway Works

1.24 The Proposed Development includes a range of additional highway improvements to the following junctions:

- Junction 16 of the M1 (M1/ A4500 (east to Northampton)/ A45 (west to Daventry));

- A4500, Weedon Road (east)/ Tollgate Way/ A4500, Weedon Road (west)/ A5076, Upton Way;
- A5076/ A5123/ Upton Way Roundabout (Pineham Park) (Dane Camp Way);
- A5076 (west)/ Hunsbury Hill Avenue/ Hunsbarrow Road/ A5076, Danes Camp Way/ Hunsbury Hill Road;
- Towcester Road/ A5076, Danes Camp Way/ A5123, Towcester Road/ Mere Way/ Tesco Access;
- A45 (south)/ Eagle Drive/ A45 (north)/ Caswell Road;
- A45, Nene Valley Way (south); A428, Bedford Road (west)/ A5095, Rushmere Road/ A45, Nene Valley Way (north)/ A428, Bedford Road (east);
- A45, Nene Valley Way (south); A43, Lumbertubs Way/ A45, Nene Valley Way;
- Junction 15 of the M1 (M1/ A45 (north to Northampton and Wellingborough)/ Saxon Avenue/ A508, Northampton Road (south to Milton Keynes));
- Tove Roundabout (A43, Towcester Bypass (southwest)/ Towcester Road/ A5, (north)/ A43 (northeast)/ A5, Watling Street (southeast));
- Abthorpe Roundabout (Abthorpe Road/ A43, Towcester Bypass (north)/ Brackley Road/ A43, Towcester Bypass (south));
- A5076, Upton Way (south)/ Telford Way/ A5076, Upton Way (north)/ Walter Tull Way/ Dustan Mill Lane;
- A5076, Upton Way (south)/ High Street/ A5076, Upton Way (north)/ Dustan Mill (Stub);
- A508, Harborough Road (south)/ A5199, Welford Road/ A508, Harborough Road (north)/ Cranford Road/ Kingsland Avenue;
- A43/St John's Road;
- A43 Northampton Road; and
- Pedestrian/Cycle Way along Northampton Road and between Barn Lane to the junction of Collingtree Road

1.25 The Proposed Development for which development consent will be sought is defined by a series of parameters. The parameters and the elements to be fixed are presented at Section 4 of this Planning Statement. An Illustrative Masterplan has been prepared which illustrates how the Proposed Development could be delivered within those parameters.

Approach to Consultation

1.26 In accordance with the PA2008, the Applicant has been undertaking a structured and comprehensive programme of pre-application consultation with the local community and stakeholders. This included one stage of 'non-statutory' consultation (Phase 1 – carried out between April and October 2016) on early draft proposals and preliminary baseline environmental information, and this stage of 'statutory' consultation on detailed draft proposals (Phase 2 – being held from 15 March to 23 April 2018).

1.27 This draft Planning Statement has been published as part of the Phase 2 Consultation on the Proposed Development. Consultation with the community is being carried out in accordance with the published Statement of Community Consultation (SoCC) under Section 47 of the PA 2008. Consultation with statutory bodies and the general public will be run concurrently to meet the requirements of Sections 42 and 48 of the PA2008.

1.28 The Applicant acknowledges that a development of this scale has significant implications for local people, particularly those people living close to the Order Limits. The Applicant will consider and have regard to all the responses received from consultees, adjust plans to reflect their knowledge of the area and will take into account views expressed in relation to the Rail Central project as a result of this Phase 2 Consultation. The amendments made to the Rail Central project as a result of feedback obtained through Phase 1 Consultation and continuing design development are explained in Section 3 of this Planning Statement.

1.29 The representations received during Phase 1 Consultation were recorded, analysed and used to inform the evolution of the Rail Central project.

2. Site Context and Description

Site Location

2.1 The Potential Development Area (the 'Order Limits'), are shown at Appendix 5.1 of the PEIR. Comprising the Main SRFI Site, J15a works and other associated development, the Order Limits are located in Northamptonshire in the East Midlands region of England, approximately 20km north-west of Milton Keynes and the Main SRFI Site and J15a sites are approximately 6km south of Northampton.

2.2 The rail interchange, warehousing, access from the A43(T), and associated infrastructure falls within the administrative boundary of South Northamptonshire Council (SNC). Other highways works are also required, which fall within Northampton Borough Council (NBC). The proposed works at J15a span across both authorities.

2.3 This section of the statement provides an overview of the wider context where the Order Limits are located. A description of the Main SRFI Site, J15a and associated minor highways works sites are discussed in turn. Finally, the local policy designations associated with the two NSIP sites are also confirmed.

Wider Context

Northamptonshire Context

2.4 Northamptonshire is a predominantly rural county situated in the heart of England. The western half of the County benefits from good north-south links, being on the spine of the M1/M6 motorway and West Coast Main Line (WCML), and Northampton on the Northampton Loop Line (NLL), giving the County good access to the UK's two biggest cities, London and Birmingham.

2.5 The eastern half of the county is also a key corridor with the Midland Main Line railway running north-south, and the A14 – a dual-carriageway connecting the M40 at Ardley, Oxfordshire to Stamford, Lincolnshire. The strategic positioning of the district – which is effectively at the cross roads of the strategic national and rail network – provides excellent accessibility.

2.6 It is possible to reach over 90% of the population of England and Wales within a drive time of four hours; five international airports are within two hours' drive and it is approximately a three hour drive to the Ports of Liverpool, Haven and the Ports of Southampton and Felixstowe. The WCML is the principal route for intermodal and express freight traffic in Great Britain forming a core part of the Strategic Freight Network (SFN) able to handle the longest freight trains using diesel or electric traction and capable of carrying containers from deep sea traffic.

2.7 These excellent road and rail connections coupled with the County's central location have laid the foundations for a strong distribution sector, largely road based, but with the emergence of a large rail-served freight distribution site at Daventry International Rail Freight Terminal (DIRFT).

2.8 Other important routes include the A45 and A43 which together link the east and west of the county, and connect the A14 to the M40 and onward links to Oxford and the south of England.

2.9 As a result of its geography and transport infrastructure, Northampton has emerged to be a popular location for warehousing and a logistics hub. Indeed, this is acknowledged by the Local Economic Partnership (LEP) which confirms that Northampton has a strong market for the growth of distribution and logistics sectors[2]. As the population and economy continues to expand, with business and consumers demanding ever-greater product choice and availability, there is also expected to be a consistent upward trend in demand for warehousing. The inherent geographical advantages of the Northamptonshire area mean that much of this growth is likely to be concentrated here.

Site Context (Main SRFI Site)

The Rail Context

2.10 The Main SRFI Site is bounded to the south and south-west by the WCML "fast lines" (also referred to as the London to Rugby Line) and to the east by the WCML "slow lines" (also referred to as the Roade and Rugby New Line or the NLL). All four lines are electrified with overhead 25kV AC catenary and cleared to W10 loading gauge (loading gauge is the maximum permitted cross-sectional profile of a rail vehicle and its load, and varies across the UK). The four WCML running lines split into two separate routes south of the Main SRFI Site at Roade Cutting, and re-join as a single route at Hilmorton Junction south of Rugby.

2.11 The WCML links London and the South East with the Midlands, North West and Scotland, and is the principal route for movement of north-south intermodal (containerised) and conventional wagon rail traffic of relevance to the small network of existing SRFI. The WCML forms a core part of the Trans-European Network (TEN-T), and south of Crewe to London is one of the few sections of the national network already cleared for 775m length trains (this being extended south to Southampton by the end of 'Control Period 5' (i.e. 2019).

2.12 At present around 580 train paths per day are scheduled to pass the Main SRFI Site along the fast and slow lines, with around 90% of these used in practice. 20% of paths are used for freight services. The proportion of freight trains routed via the fast or slow lines can vary overnight according to engineering works, with services diverted onto each side accordingly.

North

2.13 To the north, the Main SRFI Site is bounded principally by the village of Milton Malsor, which is designated as a Conservation Area. There are 34 Grade II Listed Buildings and one Grade II* Listed Building in the village (Church of the Holy Cross) (see Appendix 12.1), and those closest to the Main SRFI Site include The Old Rectory and Mortimers on Rectory Lane.

[2] Proposition for Northamptonshire LEP Status: A Powerhouse for Growth, page 9, July 2011

2.14 Gayton Road runs from east to west along the northern boundary of the Main SRFI Site and intersects with Towcester Road/Northampton Road. At this junction the road then becomes Rectory Lane, which is located beyond the northern boundary and to the south of Milton Malsor.

2.15 Milton Business Park abuts the Main SRFI Site's north-western corner, which includes, amongst other uses, a vehicle service and parts centre. The residential dwellings of Gaytonway, Copper Beeches, Woodbury, Parley Pole and Spring Gardens run from north to south along Towcester Road at the intersection with Gayton Road/Rectory Lane.

2.16 A parcel of agricultural land, which is bisected by Barn Lane running from north to south, and Milton Football club complete the Main SRFI Site's northern boundary to the north-east.

2.17 There is a transport yard immediately adjacent to the north-west corner of the Main SRFI Site, in what appears to be a former sand pit adjacent to Towcester Road.

2.18 The County Town of Northampton lies approximately 6 km to the north of the Main SRFI Site.

East

2.19 The NLL defines the majority of the Main SRFI Site's eastern boundary, although some land to the east of the NLL is also included in the Order Limits to allow for footpath creation to link to the existing footpath network. Beyond the NLL lie agricultural land and the M1 Motorway. Junction 15 of the M1 motorway is located approximately 1.17 km from the eastern boundary of the Main SRFI Site.

2.20 The villages of Collingtree and Courteenhall lie approximately 1.5km to the north-west and 2km to the south-west respectively.

South

The WCML directly abuts the length of the southern boundary of the Main SRFI Site running from east to north-west. Beyond this lies the village of Blisworth, which like Milton Malsor, is designated as a Conservation Area. There are a total of 37 Grade II Listed Buildings and two Grade II* Listed Buildings (No.3 Stoneacre, High Street and Church of St John the Baptist) in the village, with the closest to the Main SRFI Site being the Railway Bridge over Northampton Road and No.25 and No.27 Grafton Villas.

2.21 Station Road runs from west to east and terminates at a T-Junction with Northampton Road, which runs from north to south through the Main SRFI Site. At the junction of Northampton Road and Station Road lie a number of residential dwellings, including Sumach, Glendale, Cartref and Traquair.

2.22 The Grand Union Canal (originally named the Grand Junction Canal) runs from north to south and forms part of the south-west boundary of the Main SRFI Site. The canal was constructed between 1793 and 1805 to provide a more convenient trade route

between London and the Midlands than the existing Oxford Canal and is a designated Conservation Area.

2.23 An Anglian Water Sewage Treatment works (also referred to as Blisworth Water Recycling Centre) is located to the immediate south of the Main SRFI Site.

2.24 Between the southern boundary and the WCML, there is a row of terraced houses and a small business park, known as JBJ Business Park, and a small sewage treatment works. The business park includes a workshop, food recycling facility, garage, carpet and caravan sales.

2.25 Towcester lies approximately 6km to the south of the Main SRFI Site, whilst the village of Roade lies approximately 1.5km to the south-west.

West

2.26 The A43 is adjacent to and crosses within the Main SRFI Site. The western boundary is defined by Arm Farm and a spur/branch of the Grand Union Canal known as 'the Northampton Arm'. Gayton Marina, which is connected to the Northampton Arm, is located beyond the Main SRFI Site boundary to the west.

2.27 As set out above, the Grand Union Canal is a designated Conservation Area. The Milepost alongside the towpath and Bridge no.47 are Grade II Listed.

2.28 The town of Daventry lies approximately 16km to the north-west of the Main SRFI Site, whilst the villages of Gayton and Rothersthorpe lie approximately 1.8km to the south-west and 1.2km to the north-west respectively.

The Main SRFI Site

2.29 The Main SRFI Site itself comprises a total of approximately 291ha (719 acres). The A43 (T) passes through the Main SRFI Site to the west. Northampton Road/Towcester Road runs through the Main SRFI Site from north to south. A number of farms, small holdings and associated development are located within the east of the Main SRFI Site. All of these existing developments are accessed from Barn Lane, which runs south from Milton Malsor and comes to an end within the Main SRFI Site.

2.30 The existing premises in the Main SRFI Site consist of:

- Flowercraft Nursery;
- Arm Farm;
- Manor Farm;
- Hill Farm;
- Lodge Farm;

- Rathvilly Farm;
- Corteenhall Estate; and
- A disused petrol filling station (located within the western area of the site, with access and egress gained directly from the A43).

2.31 The Main SRFI Site largely consists of large-scale arable farmland, with some smaller scale pastoral fields, and semi-improved grassland more common in the south-western and north-eastern parts of the Main SRFI Site. Nearly three-quarters of the land is classified as moderate quality Subgrade 3b, with the remainder predominantly in Subgrade 3a and Grade 2.

2.32 Other than field-corner copses, it contains no woodland. Field boundaries generally have hedgerow or intermittent tree cover, however this is limited. The fields are mostly separated by relatively species-poor hedgerows probably dating from around the beginning of the 19th Century, although there are a few more species-rich and older hedges along Towcester Road and elsewhere. There are occasional belts of dense and mature deciduous tree planting beside linear infrastructure features, such as the A43 road at the western extent of the Main SRFI Site and the NLL at its eastern extent.

2.33 The field margins generally support brambles, rough grassland and tall-ruderals. There are a few small field-corner ponds surrounded by scrub or trees, but the Main SRFI Site lacks woodland save for one small spinney next to Barn Lane and a modern plantation next to the A43.

2.34 There are a number of trees, mainly mature Quercus robur (Pedunculate Oak) and Fraxinus excelsior (Ash) in the hedgerows and as lone field trees. A small proportion of trees are currently protected by Tree Preservation Order (TPO) or are described as being Veteran, Important or Ancient, as shown by the Hedgerow and Tree Plan.

2.35 The Main SRFI Site is shown by the EA's Flood Zone Mapping to be predominantly within Flood Zone 1 (land assessed as having a less than 1 in 1,000 annual probability of river or sea flooding in any year (<0.1%)). However, small areas of the Main SRFI Site immediately adjacent to the Milton Malsor Brook and an Unnamed Watercourse are shown to be at an increased risk with some land categorised as being at medium and high risk.

2.36 There are a number of small ponds and springs in the west and centre of the Main SRFI Site which are drained via agricultural ditches to the Milton Malsor Brook. The Milton Malsor Brook flows in a predominantly northerly direction through the approximate centre of the Main SRFI Site before draining into a watercourse a short distance to the north of the Main SRFI Site. It is understood that the watercourse is referred to locally as the Shoal Creek. The Wootton Brook rises in the north-east of the Main SRFI Site, flowing northward. The Wootton Brook drains the north and north-eastern areas of the Main SRFI Site.

2.37 Generally the Main SRFI Site is located within a shallow south to north orientated valley associated with the Milton Malsor Brook. Higher ground is present in the north-west, north and east associated with variations in the geological conditions, specifically

the occurrence of Glaciofluvial sands in the north and Till in the west and east. There are a number of small ponds or springs within the Main SRFI Site. Earthworks are present in:

- the north-west of the Main SRFI Site (Rathvilly Farm), where ground levels are raised:
- the south-west of the Main SRFI Site in the form of embankments for the Grand Union Canal and former Great Central Railway; and,
- in the south-east of the Main SRFI Site, understood to be arisings deposited following excavation of Roade Cutting which is located to the southeast of the Main SRFI Site along the West Coast Main Line.

2.38 The Main SRFI Site is in part subject to designation as a Minerals Safeguarding Area (Policy 28) of the Minerals and Waste Local Plan 2017 (this policy covers substantial areas of land beyond the Main SRFI Site). A small portion of the Main SRFI Site falls within the buffer zone of a sand and gravel extraction allocation (Policy 4 of the Minerals and Waste Local Plan 2017) to the north of the Main SRFI Site.

2.39 High Voltage and Low Voltage cables owned by WPD intersect the Main SRFI Site in a number of locations, serving existing dwellings and farms. Overground BT Openreach cable currently serves a number of dwellings. There is also currently a 90mm MDPE water service to an existing farm in the north-east section of the Main SRFI Site. This main is fed from a 10" AC (Asbestos Cement) main which lies within Rectory Lane. Anglian Water have provided sewer plans that indicate the only public sewer within the Main SRFI Site is a 300mm diameter foul sewer that runs from south to north through the western section of the Main SRFI Site and parallel to the Milton Malsor Brook.

2.40 There are currently two major oil pipelines running through the south-west corner of the Main SRFI Site, owned by BPA. This is a buried service with regular marker posts at property and road boundaries. The pipes rise from beneath the ground to cross the river at the western boundary of the site.

2.41 Existing public rights of way cross the Main SRFI Site, as shown by the public rights of way plan.

2.42 There are no designated heritage assets located within the Main SRFI Site. There is, however, potential for buried archaeological remains to be preserved within the Main SRFI Site and that such sites could date to any period from the prehistoric onwards. There is a particular potential for the discovery of further remains of the Later Iron Age/Roman and Romano-British periods.

Site Context (J15a Site)

2.43 Land around the J15a Works comprises the immediate roads for J15a of the M1, and adjoining land parcels, which contain farmland and industrial buildings. The M1 runs north-west to south-east, and the A43 runs north to south. The A5123 runs north-south to the north of the motorway. The junction itself comprises two roundabouts with a passageway under the M1 and associated slip roads to the motorway to the

west, passing industrial buildings comprising the motorway services (Northampton Services). In addition to the roads feeding directly to the junction, the local road network comprises Banbury Lane to the west of the junction, passing on a bridge over the M1, Towcester Road to the east, also crossing the M1 by bridge, and other local roads such as Northampton Road, Milton Road and Kislingbury Road, joining together the surrounding villages of Milton Malsor, Blisworth and Rothersthorpe.

2.44 The Grand Union Canal runs north to south to the west of the junction, passing under the two slip roads and the carriageway of the M1.

2.45 To the north of the J15a Site (in NBC administrative area) are the southern suburbs of Northampton (Shelfleys), to the east is agricultural land with Towcester Road and the WCML approximately 1 km distant, to the south (in SNC administrative area) is agricultural land, rising to the village of Milton Malsor approximately 1 km to the south-east, and to the west is the village of Rothersthorpe, and industrial buildings close to Northampton Services.

2.46 There are small patches of woodland to the west and south of the J15a Site, adjacent to the Grand Union Canal, and footpaths cross the agricultural land between the nearby villages.

2.47 Within approximately 1km of the junction are the listed buildings in Milton Malsor as indicated above, and Locks and bridges associated with the Grand Union Canal. There are also ten listed buildings in Rothersthorpe.

Site Context (Other Minor Highway Sites)

M1 Junction 16

2.48 Located c.7.81km to the west of Northampton and c.1.6km to the north east of Nether Heyford. Junction 16 provides the M1 with connectivity to and from the A4500 (east movement) and the A45 (west movement). The junction consists of both northbound and southbound access and egress slipways to the M1, with a raised flyover circling the motorway. There is some landscaping located internally within the junction, positioned between the circular flyover and the motorway.

2.49 The junction is primarily surrounded by land in agricultural use. A small area of land directly to the west of the junction is covered by hardstanding and operated by D and M Recycling and Waste Management. The closest sensitive receptor to the Site is Lodge Farm, which is located c.280m to the north of the junction.

2.50 Works to the junction are to cover the northbound and southbound exit slipways, access and egress from the A45 and exit from the A4500 onto the junction. The Order Limits Plan, enclosed at Appendix 5.1 of the PEIR, fully details the extent of the potential development area for this junction.

A4500/ Upton Way/ Tollgate Way Roundabout

2.51 The Junction is located within the western fringes of the settlement of Northampton. It provides connectivity between the A4500 (east to west movement), Tollgate Way (north movement) and the A5076 (Upton Way) (south movement). The junction

consists of a standard roundabout design, with four access and egress points. Some landscaping is located within the centre of the junction.

2.52 The junction is surrounded by a number of urban uses. This includes Westgate Industrial Estate to the north east and Sixfields Leisure Park to the south east. The south western and north western boundaries are primarily surrounded by existing residential development. Notwithstanding this, a Self-Storage unit and Millway Primary School are situated to the north west of the junction.

2.53 Works are only proposed to the entrance way onto the roundabout from the A4500 and the exit from the roundabout onto Tollgate Way. The Order Limits Plan, enclosed at Appendix 5.1 of the PEIR, fully details the extent of the potential development area for this junction.

A5076/ A5123/ Upton Way Roundabout

2.54 Positioned within the south western suburb of Northampton known as Hunsbury Meadows, the junction provides connectivity between the A5076 (north and east movement), the A5123 (south movement) and Upton Valley Way East (west movement). The junction consists of a standard roundabout with four access and egress points.

2.55 The River Nene and Grand Union Canal (Northampton Arm) run in unison to the north of the junction. Beyond the waterways to the north, the junction is primarily surrounded by land in agricultural use. In contrast, land to the south east, south and south west is primarily in residential use and occupied by detached and semi-detached properties.

2.56 Works to the junction are proposed within the junction itself, all access routes onto the junction and the egress point from the junction onto the A5076. The Order Limits Plan, enclosed at Appendix 5.1 of the PEIR, fully details the extent of the potential development area for this junction.

A5076/ Hunsbury Hill Road Roundabout

2.57 Located within Hunsbury, a suburb of Northampton located c.2.3km from the Town Centre, the junction provides connectivity between the A5067 (east to west movement), Hunsbury Hill Road (south movement), Hunsbury Hill Avenue (north west movement) and Hunsbarrow Road (north east movement).

2.58 All boundaries of the junction are surrounded by residential development, primarily comprising detached and semi-detached dwellings. Notwithstanding this, a building in employment use and associated car parking is positioned adjacent to the north west of the junction.

2.59 Works are proposed to the junction itself, all entrance routes onto the junction and egress routes from the junction on the A5067. The Order Limits Plan, enclosed at Appendix 5.1 of the PEIR, fully details the extent of the potential development area for this junction.

A5076/ Towcester Road/ Tesco Roundabout

2.60 Located c.2.6km to the south of Northampton Town Centre, the junction provides connectivity between the A5076 (east and north west movement), Towcester Road (west and north east movement) and Tesco Mereway. The junction consists of a roundabout with five access and egress points. A pedestrian route through the junction is provided via three underpasses, allowing for north, east and south movement on foot or by bicycle. Some landscaping is located centrally within the junction.

2.61 Directly to the north, the junction is bound by residential development consisting of detached and semi-detached dwellings. Towcester Road Cemetery is located adjacent to the north east of the junctions. A large Tesco Extra Superstore is positioned directly to the south, with access being served from the junction. Hunsbury Hill Country Park is located to the north west of the junction.

2.62 Works are proposed to the majority of the junction. The Order Limits Plan, enclosed at Appendix 5.1 of the PEIR, fully details the extent of the potential development area for this junction.

A45 Brackmills Roundabout

2.63 The junction is located c.2.67km to the south east of Northampton Town Centre, providing connectivity between the A45 (north and south movement), Caswell Road (south east movement) and Eagle Drive (north west movement). The junction consists of both northbound and southbound access and egress slipways to the A45, with a raised flyover circling the dual carriageway. Subways run beneath the circular raised flyover, whilst a bridge also crosses the A45, providing pedestrian movement through the junction from east to west. Some landscaping is provided within the junction and in its immediate surrounds.

2.64 A series of industrial distribution sheds are located directly to the east of the junction, a business park is located to the south. To the west and north of the junction lie Delpare Golf Course and an associated hotel.

2.65 Works to the junction are only proposed at the Caswell Road approach. The Order Limits Plan, enclosed at Appendix 5.1 of the PEIR, fully details the extent of the potential development area for this junction.

A45 Barnes Meadow Interchange

2.66 Located c.2.31km to the east of Northampton Town Centre, the junction provides connectivity between the A45 (north and south movement), the A428 (east and west movement) and the A5095 (north movement). The junction consists of both north and south bound access and egress slipways to the A45, with a circular roundabout formation positioned below the dual carriageway. An element of landscaping is located within the centre of the junction and within its immediate surroundings.

2.67 The River Nene is positioned directly to the south and east of the junction. Beyond the River to the east is a hotel and business park, to the south are a series of industrial distribution sheds. To the west of the junction is Barnes Meadow Nature Reserve, whilst to the north is a garden centre and areas of green public open space.

2.68 Works are proposed to the circular roundabout formation and access onto the junction from both north and south bound travel from the A45 and from the A428. The Order Limits Plan, enclosed at Appendix 5.1 of the PEIR, fully details the extent of the potential development area for this junction.

A45/ A43 Roundabout Lumbertubs

2.69 The junction is located c.4.6km to the east of Northampton Town Centre and provides connectivity between the A45 (north east and north west movement), the A43 (north movement) and Ferris Row (south movement). The junction consists of both northbound and southbound access and egress slipways to the A45, with a raised flyover circling the motorway. There is some landscaping located internally within the junction, positioned between the circular flyover and the motorway.

2.70 Located directly to the south of the junction is Riverside Retail and Leisure Park. To the west and north, the junction is surrounded by residential development, primarily consisting of detached and semi-detached dwellings.

2.71 Works are only proposed to the access of Ferris Row on to the junction and the southern leg of the raised flyover. The Order Limits Plan, enclosed at Appendix 5.1 of the PEIR, fully details the extent of the potential development area for this junction.

M1 Junction 15

2.72 Junction 15 of the M1 is located c.5.84km to the south of Northampton Town Centre. The junction provides connectivity between the M1 (north west and south east movement), the A45 (north movement), Saxon Avenue (north east movement) and the A508 (south movement). The junction consists of north and south bound access and egress to the M1, a flyover above the motorway links access from the A508, A45 and Saxon Avenue. There is some landscaping located within the junction and within its immediate surroundings.

2.73 To the east of the junction is a hotel, beyond which are a number of sheds in industrial use. Directly to the north of the junction are a number of fields in agricultural use, beyond which is a further hotel. Land to the south and west of the junction is in arable agricultural use.

2.74 Works are proposed to the A45 approach to the junction, the southern side of the motorway flyover and the M1 north bound egress onto the junction. The Order Limits Plan, enclosed at Appendix 5.1 of the PEIR, fully details the extent of the potential development area for this junction.

Tove Roundabout

2.75 Located c.850m to the north west of Towcester Town Centre, the junction provides connectivity between the A43 (north east and south west movement), the A5 (north and south movement) and Towcester Road (west movement). The junction consists of a roundabout formation with five access and egress points. Some landscaping is located centrally within the junction and within the immediate surroundings.

2.76 Immediately to the north of the junction lie a pre-school nursery, garden centre and land within agricultural use. To the east is an area of greened land surrounded by a number of buildings in employment and retail use, including a Tesco Superstore and a

car dealership. A petrol filling station car dealership and waste recycling centre are located to the south of the junction. To the west of the junction is a further car dealership and to the north west land in agricultural use.

2.77 Works are proposed to the entirety of the junction. The Order Limits Plan, enclosed at Appendix 5.1 of the PEIR, fully details the extent of the potential development area for this junction.

A43 Abthorpe Roundabout

2.78 The junction is located c.1km to the south west of Towcester Town Centre. Consisting of a standard roundabout, it provides connectivity between the A43 (north and south movement), Brackley Road (east movement) and a further unnamed road (west movement). Some landscaping is provided centrally within the roundabout and within its immediate surroundings.

2.79 Suburban residential dwellings are predominantly located to the north east, east and south east of the junction. To the south west is a small road service station setup, which includes the provision of a McDonalds, a petrol filling station and hotel. Land surrounding the junction to the west and north west is within arable agricultural use.

2.80 Works are proposed to the north bound access and egress, the junction itself and access to the junction from Brackley Road. The Order Limits Plan, enclosed at Appendix 5.1 of the PEIR, fully details the extent of the potential development area for this junction.

Upton Way/ Telford Way Roundabout

2.81 The junction is located c. 2.3km to the west of Northampton Town Centre. Providing connectivity between the A5067 (north and south movement), an unnamed road (east movement), Duston Mill Lane (south east movement) and Telford Land (west movement), the junction is of a standard roundabout construction. Five access and egress points are provided at the junction. Some landscaping is provided centrally within the junction.

2.82 To the north east of the junction is a small leisure park, beyond which is Northampton Town Football Club Stadium. Duston Mill Meadow Nature Reserve and Storton's Pits Nature Reserve are located directly to the south and south east of the junction. To the south west and north west the junction is surrounded by predominantly residential development, interspersed with a hotel, petrol filling station and a restaurant.

2.83 Works are proposed to the majority of the junction. The Order Limits Plan, enclosed at Appendix 5.1 of the PEIR, fully details the extent of the potential development area for this junction.

Upton Way/ High Street Roundabout

2.84 Located c.2.3km to the south west of Northampton Town Centre, the junction provides connectivity between the A5067 (north and south movement), Duston Mill (east movement) and High Street (west movement). Consisting of a standard roundabout construction, the junction has four separate access and egress points. Landscaping is located centrally within the junction and within its immediate surroundings.

2.85 To the north east, east and south east of the junction is Duston Mill Meadow Nature Reserve. Upton Country Park is located to the south west of the junction, whilst land to the west and north west is surrounded by land in residential use.

2.86 Works are proposed to the entirety of the junction. The Order Limits Plan, enclosed at Appendix 5.1 of the PEIR, fully details the extent of the potential development area for this junction.

A508 Harborough Road/ A5199 Welford Road

2.87 The junction is positioned c.3km to the north of Northampton Town Centre. Providing connectivity between the A508 (north and south movement) and the A5199 (north west movement), the junction is present in a T-formation and includes an arrangement of slip roads and ghost islands.

2.88 The junction is surrounded by a series of urban uses, including a branch of Lloyds bank to the north, residential properties to the east, a Waitrose supermarket to the south and a Methodist Church to the west.

2.89 Works only relate to the access of the A5199 on to the junction. The Order Limits Plan, enclosed at Appendix 5.1 of the PEIR, fully details the extent of the potential development area for this junction.

A43/St John's Road

2.90 This junction is located c.9.6km south of Northampton Town Centre and 3.1km south of the Main SRFI site. The junction provides access onto the A43, in both the north and south directions, from St John's lane at the west and an unnamed road at the east. Immediately west of the junction lies approximately 9 residential properties, a Health Centre and a School. Agricultural land adjoins the junction to the north, east and south. Agricultural buildings, access via the unnamed road, lie to the east of the junction.

2.91 Works are proposed to the northbound carriageway including warning signs and high friction surfacing. The Order Limits Plan, enclosed at Appendix 5.1 of the PEIR, fully details the extent of the potential development area for this junction.

A43 Northampton Road

2.92 This junction is located c 11.2km south west of Northampton Town Centre. The area of works is approximately 150m north of a junction linking the southbound carriageway of the A43 to Northampton Road.

2.93 A residential property lies to the south of these proposed works, with agricultural land and wooded areas/tree screening adjoining the other boundaries.

2.94 The works proposed comprise junction ahead warning signs with associated countdown markers. The Order Limits Plan, enclosed at Appendix 5.1 of the PEIR, fully details the extent of the potential development area for this junction.

Pedestrian/Cycle Way along Northampton Road and between Barn Lane to the junction of Collingtree Road

2.95 These works comprise off-site infrastructure improvements to provide suitable pedestrian and cycling infrastructure between the main site, the surrounding villages and the southern residential areas of Northampton. The northern most extent of these works is c.3.3km south of Northampton Town Centre.

2.96 The proposed works extend along Northampton Road from south of Willow Lodge, northwards where the road turns into Towcester Road, past Milton Malsor and into the outskirts of Northampton, terminating at the roundabout at Ladybridge Drive.

2.97 The works include widening and extension of existing footways, and the provision of cycleways. The Order Limits Plan, enclosed at Appendix 5.1 of the PEIR, fully details the extent of the potential development area for this junction.

Planning Policy Designations

Statutory Designated Sites

Main SRFI Site

2.98 Statutory designated sites within the relevant study areas (5 km for natural heritage and landscape, 2 km for built heritage and 1 km for archaeology) of the Main SRFI Site are listed at Appendix 2.1 of the PEIR**.**

2.99 There are five statutory designated sites for Natural Heritage within 5 km of the Main SRFI Site Order Limits, comprising of two Sites of Special Scientific Interest (SSSI) and three Local Nature Reserves (LNR). The nearest is Roade Cutting SSSI which is a geological SSSI, adjacent to the Order Limits to the south east, at the junction of the WCML and NLL railway lines. Blisworth Rectory Farm Quarry SSSI is approximately 1.5 km from the Order Limits to the south, located in a disused quarry to the south west of Blisworth.

2.100 In addition, the Upper Nene Valley Gravel Pits Special Protection Area (SPA) (and SSSI and Ramsar site) is within 6 km of the Main SRFI Site. It is designated for bird species that may roost on agricultural land at considerable distances from the SPA.

2.101 There are three Registered Parks and Gardens within 5 km of the Main SRFI Site. Courteenhall is located 1 km east of the Main SRFI Site, Stoke Park is located approximately 4.2 km south and Easton Neston is located approximately 4.9 km south, south-west of the Main SRFI Site.

2.102 There are eight Conservation Areas within 2 km of the Main SRFI Site. These include the Grand Union Canal and Milton Malsor Conservation Areas, which are adjacent to the Order Limits to the west and north respectively, Blisworth, 0.5 km to the south, Collingtree 0.8 km to the north east, Gayton 1km to the west, Rothersthorpe 1 km to the north west, and Courteenhall and Road both 1.8 km to the south east. There are clusters of listed buildings within these Conservation Areas:

- Thirty nine no. in Blisworth (2 no. Grade 2* listing, and the remainder Grade 2);

- Twelve no. in Collingtree (1 no. Grade 2* listing, and the remainder Grade 2);
- Six no. in Courteenhall (4 no. Grade 2* listing, and 2 no. Grade 2);
- Eight no. in Gayton (1 no. Grade 1, 1 no. Grade 2* and the remainder Grade 2);
- Thirty five no. in Milton Malsor (1 no. Grade 2* and the remainder Grade 2);
- Fifteen no. in Roade (1 no. Grade 2* and the remainder Grade 2);
- Ten no. in Rothersthorpe (1 no. Grade 2* and the remainder Grade 2); and
- Seventeen no. in Grand Union Canal (all Grade 2).

2.103 There is also one Listed Building that was included in the Built Heritage Study in Northampton – the Grade 2 Express Lift Tower.

2.104 There are no statutory archaeological sites within 1 km of the Order Limits. The nearest is in Blisworth, approximately 1.2 km south from the Order Limits (Churchyard Cross Base in St John the Baptist Churchyard) and "The Berry Ringwork" in Rothersthorpe, approximately 1.2 km to the north west.

J15a Site

2.105 Statutory designated sites within the relevant study areas (5km for natural heritage, 1 km for landscape and archaeology, and 0.25 km for built heritage) of the J15a Works are listed at Appendix 2.1 of the PEIR**.**

2.106 There are two international statutory designated sites for Natural Heritage within 10 km of the Order Limits, comprising one Ramsar and one Special Protection Area (SPA) – both the Upper Nene Valley Gravel Pits (also a SSSI); approximately 5.7km north east from the J15a Order Limits. There are also six national statutory designated sites within 5km of the Order Limits, comprising 2 Sites of Special Scientific Interest (SSSI) (Roade Cutting and Blisworth Rectory Farm Quarry – both over 3 km from J15a) and four Local Nature Reserves (LNR); the nearest being Storton's Pits, approximately 2km to the north.

2.107 There is one Conservation Area within the J15a Site; the Grand Union Canal, and four Grade 2 listed buildings within or immediately adjacent to the J15a Site, all of which are locks associated with the Grand Union Canal. There are twelve further Grade 2 listed buildings within 0.25km of the J15a Site, again all associated with the canal (locks, bridges and a lock cottage). Rotherthsthorpe Conservation Area is also approximately 1 km to the west of the J15a Site.

2.108 There are no statutory archaeological sites within 1 km of the J15a Site.

Minor Highway Works

2.109 The closest statutory designated sites within the relevant study areas (2km for natural heritage, 1 km for landscape and archaeology, and 0.25 km for built heritage) of the Minor Highway Works are listed at Appendix 2.1 of the PEIR.

2.110 The nearest international site (Upper Nene Valley Gravel Pits SPA, SAC and SSSI) is approximately 0.7 km from Junction 11 (A45/A43 Roundabout Lumbertubs). All proposed work would be within the highway boundary at this junction, comprising reconfiguring the existing road markings. The nearest SSSI (Bugbrooke Meadow) is approximately 0.4 km from Junction 1 (M1 J16). Roade Cutting SSSI is 1.6 km from Junction 12 (M1 J15).

2.111 There are Local Nature Reserves (LNR) located within 500m of Junction 10 (adjacent to Barnes Meadow LNR), Junction 19 (effectively adjacent to Storting's Pits LNR), Junction 3 (480m from Storting's Pits LNR) and Junction 20 (200m from Storting's Pits LNR). Junctions 4, 6 and 7 are also within 2 km of Storting's Pits LNR. Junction 9 is approximately 640 m from Barnes Meadow LNR and Junction 25 740m from Kingsthorpe LNR. Greens Norton Pocket Park Nature Reserve is within 2 km of Junctions 14 and 15.

2.112 There are Grade 2 listed buildings within 250m of the Order Limits of Junction 6 (Hunsbury Hill Farmhouse), Junction 7 (Mortuary Chapel), Junction 9 (Farmhouse at Home Farm), Junction 15 (Towcester War Memorial) and Junction 25 (Baptist Chapel, manor House and Enterprise Factory). The Battle of Nottingham Registered Battlefield is within 250 m of Junction 9 and 10.

2.113 There are no statutory archaeological sites within 1 km of the Order Limits.

Non-Statutory Designated Sites

Main SRFI Site

2.114 There are twenty seven non-statutory designated sites for Natural Heritage within 2km of the Order Limits of the Main SRFI Site, comprising four Local Wildlife Sites (LWS) and twenty three Potential Wildlife Sites (pWS). These are listed in Appendix 2.1 of the PEIR and described in more detail in Chapter 16: Biodiversity of the PEIR. These include two pWSs on the Main SRFI Site (Roade Cutting, and Site 241), and five less than 100m from the Main SRFI Site, including the Grand Union Canal Local Wildlife Site and four pWSs.

2.115 There are twelve areas of ancient woodland within 5km of the Order Limits of the Main SRFI Site. They comprise six areas of Ancient Semi-Natural Woodland (ASNW) and six areas of Planted Ancient Woodland (PAWS). The nearest area of ancient woodland to the Order Limits of the Main SRFI Site is approximately 3km to the south.

2.116 With respect to local landscape policy areas, the South Northamptonshire 'Tove Valley Special Landscape Area' is located 3 km to the south of the Main SRFI Site.

2.117 There are seventeen non-listed buildings on the Historic Environment Record (HER) within 2km of the Order Limits of the Main SRFI Site, including 7 no. in Blisworth, 4 no. in Gayton, 4 no. in Collingtree, and 1 no each in Courteenhall and Milton Malsor.

2.118 Archaeological non-statutory records included thirty eight locations on the Main SRFI Site (primarily findspots and cropmark sites recorded on the HER), and forty seven locations within 1km of the Order Limits of the Main SRFI Site. These are described and assessed in Chapter 11: Archaeology of the PEIR**.**

J15a Site

2.119 There are thirty nine non-statutory designated sites for Natural Heritage within 2km of the Order Limits of J15a, comprising fifteen Local Wildlife Sites (LWS), two of which are also designated as Local Geological Site (LGS) and twenty four Potential Wildlife Sites (pWS). These are listed in Appendix 2.1 of the PEIR and described in more detail in Chapter 16: Biodiversity of the PEIR. These include the Grand Union Canal Local Wildlife Site and pWS Site 239 which are located within the Order Limits, and one pWS (Site 250) adjacent to the Order Limits. There are no areas of Ancient Woodland within 2 km of J15a.

2.120 Archaeological non-statutory records included twenty six locations on within the J15a Order Limits (primarily findspots and ditches/ pits recorded on the HER). These are described and assessed in Chapter 11: Archaeology of the PEIR**.**

2.121 There are no non-statutory designations for built heritage within 250m of the Order Limits, or for landscape within 1 km.

Minor Highway Works

2.122 There are no recorded non-statutory designations within the relevant study areas (2km for natural heritage, 1 km for landscape, and 0.25 km for built heritage) of the Minor Highway Works. Archaeological features within the Order Limits at Junction 14 included 13 no. locations, as described in Chapter 11: Archaeology of the PEIR. These included features recorded in the HER and on historic maps, including possible buildings, roads and findspots.

3. Scheme Evolution

3.1 The Proposed Development has been carefully developed, based on a close understanding of the Main SRFI Site's characteristics. This section deals with the way in which the Rail Central project has evolved in response to the general themes that emerged from the Phase 1 Consultation between 28 April and 21 October 2016.

3.2 Further details of the scheme evolution in the early stages of the project and following Phase 1 Consultation can be found in the Draft Design & Access Statement.

Stage One Consultation

3.3 Following Phase One Consultation, which included a series of eight public exhibitions in Blisworth, Milton Malsor, Roade, Collingtree and Towcester, a number of changes were made to the draft illustrative masterplan in response to the comments received.

Reduction in Development Floorspace

3.4 There has been a reduction of overall floorspace from around 8,000,000 square feet (sqft) to 7,400,000 sqft to reduce visual impact.

Northampton Road Greenway

3.5 Following comments received during the Phase One Consultation, a green corridor parallel to Northampton Road at the Main SRFI Site will now be enhanced to create a landscape and walking route linking the villages of Blisworth and Milton Malsor. The existing route is defined with strong highway hedges broken up by intermittent areas of commercial and residential development. The Proposed Development has been set back from the existing road to provide a landscape buffer that will reduce the potential impact on landscape character between the two villages.

3.6 Mitigation mounding will wrap around the edge of the development zones to the east of Northampton Road, which will aid with screening views across towards the proposed units and associated infrastructure. Existing hedgerows and hedgerow trees along Northampton Road will be protected and retained where feasible and reinforced with small pockets of new woodland planting.

3.7 The bridge over the underpass linking the two development zones to the east and west of Northampton Road will be wide enough to accommodate a grass verge between the road and footpath and also a native hedgerow to aid with screening views back towards the Proposed Development and to provide continuation for pedestrians and road users. The footpath link between the two villages will be upgraded to a combined cycleway / footpath providing an 'off road' cycle link between the two villages and into the Proposed Development.

Arm Farm Pocket Park

3.8 A number of concerns were raised about the prospect of providing any built development on the parcel of land to the west of the A43 (Grand Junction) and consequently, the applicant confirmed that it would not be redeveloped for possible hotel and public house/restaurant, or training and innovation centre. The Main SRFI Site will instead be safeguarded to provide landscaping and ecological mitigation and

an informal pocket park for use by local residents. The proximity of this land parcel to the canal makes it of particular importance for bat mitigation with the potential to construct purpose made features. The proposed park will be low key and kept informal with native planting. The Northamptonshire Green Infrastructure Plan aspires to create a corridor of calcareous grassland along either side of the A43.

Lorry Park

3.9 The capacity of the lorry park to the south of Unit 10 at the Main SRFI Site was increased to further alleviate concerns over HGVs parking on local roads as they waited to gain access to the Rail Central site.

Reorientation of Warehouse Units

3.10 In an effort to reduce the visual impact on the Railway cottages and Northampton Road, the distance between the closest buildings (Units 3 and 4) at the Main SRFI Site and these receptors has been increased. Unit 4, which is closest to the Railway Cottages, has also been reduced in size.

Public Rights of Way

3.11 A number of concerns were raised about the impact of Rail Central on local Public Rights of Way (PROW) and Bridle Paths. The project team has taken great care to ensure that any diversion or rerouting of PROWs or Bridle Paths preserves their accessibility and character. Indeed, Rail Central's approach to PROWs and Bridle Paths has been influenced by consultation with Natural England, Northamptonshire Ramblers and the Ramblers Association, as well as local residents.

3.12 The rerouting of elements of the existing PROW will ensure that Rail Central is able to provide a continuous route around the development. Indeed, approximately 66.2 hectares, or just over half of the structural landscape around the periphery of the site, will become publicly accessible amenity land.

Landscaping Bunds

3.13 Concerns were raised about the visual impact on the surrounding villages of Milton Malsor and Blisworth. In response to these concerns, the size and number of landscaped bunds have been increased in an effort to further screen the development visually from Milton Malsor and Blisworth.

Public Car Park

3.14 In relation to comments received during the Phase One Consultation, in order to improve accessibility for employees that may naturally travel from nearby villages, the Illustrative Masterplan for the Main SRFI Site now includes for the provision of a public car park with access from Northampton Road.

Barn Lane Bus Stops

3.15 In May 2017, members of the Rail Central Local Liaison Group raised concerns that unmarked bus stops are situated at the same location at Barn Lane as where the sheltered parking for the Proposed Development was initially proposed. As a result of this dialogue, the scheme design has been revised to result in the re-location of the proposed parking at Barn Lane so that the current position of the bus stops remains.

Additional changes to the Illustrative Masterplan

3.16 In addition to those changes described above that were brought about following comments received at Stage One Consultation, a number of other changes have been made to the Illustrative Masterplan as the scheme has developed and further environmental survey work has been completed. These changes are outlined below.

(a) The Illustrative Masterplan was updated in response to traffic engineering. The main gatehouse into the Main SRFI Site was removed to allow a freer flow of traffic. The central spine road was widened to ensure it could accommodate the traffic. The cycleway/footway running along Northampton Road was extended to link the eastern site into the cycle network.

(b) A shuttle bus service and bus turning area were added to facilitate people using the Main SRFI Site.

(c) Parking numbers were updated at the Main SRFI Site to provide a ratio of spaces that accord more precisely with Local Authority Standards. The bus facility on the western site was redesigned to take up less land to allow for a landscape screen to the north. Emergency access points from Northampton Road were created solely for use in the event of an emergency.

(d) A further iteration included provision for a future High Output Operating Base (HOOB) for Network Rail. It was a facility to stable and service specialist equipment needed to maintain the rail network. Having proven the capability of the site to accommodate a HOOB facility if required in future, the masterplan and track layout was returned to its previous configuration.

(e) Units 11 & 13 of the Main SRFI Site were amended to allow for the gradients required to achieve safe access from the spine road for HGVs. Unit 10 was reduced in size to allow the public right of way more space to navigate around the western side of the unit. Amendments to the Intermodal Area and Train Maintenance Depot were considered to allow for a longer intermodal area and rail accessibility and an electricity substation was added to the development to serve the power needs of the site.

3.17 The draft Design & Access Statement provides further explanation of how the Proposed Development has evolved in response to all of the feedback received through extensive engagement and consultation.

4. The Proposed Development

4.1 The Application proposes the construction, operation and maintenance of a SRFI as well as associated highways works and other facilities (the 'Proposed Development'). The Proposed Development is situated within the 'Proposed Development Area' (the Order Limits). An application is required to be made to PINS because the Proposed Development is considered to comprise an NSIP under the PA2008.

4.2 In this case there are two types of NSIP that are applicable:

- Rail Freight Interchange (as defined in Section 26 of the PA2008); and,
- Highways (as defined in Section 22 of the PA2008).

4.3 With regards to the Main SRFI Site, it comprises an NSIP as it will:

- be situated in England and will be at least 60 Ha in size;
- be capable of handling consignments of goods from more than one consignor and to more than one consignee and capable of handling at least four goods trains per day;
- be part of the railway network in England;
- include warehousing to which goods can be delivered from the railway network in England either directly or by means of another form of transport; and
- not be part of a military establishment.

4.4 In respect of the proposed Highways Works at J15a, the PA 2008, confirms the thresholds for determining whether Highways Works comprise an NSIP in their own right. In this regard, Section 22(4)(b) confirms that Highways Works should be considered an NSIP where *"…the construction or alteration of a highway, other than a motorway, where the speed limit for any class of vehicle is expected to be 50 miles per hour or greater, is 12.5 hectares".*

4.5 The improvement works at J15a of the M1 will comprise an alternation of a highway in England other than a motorway where:

- the SoS or a strategic highways company (such as Highways England) is the Highway Authority;
- the speed limit of any class of vehicle is expected to be over 50 miles per hour; and
- the area of development is greater than 12.5 hectares.

4.6 In accordance with Section 22(9)(b) of the PA2008, this highway improvement is also an NSIP in its own right.

4.7 Where a scheme involves development which meets the criteria for more than one type of NSIP then such a scheme can be pursued in a single application for a DCO. Based on the above, it has been determined that there are two NSIPs that will form the DCO submission:

- The Main SRFI Site; and
- Works to J.15a of the M1

4.8 The elements of the Proposed Development that are not encompassed within either NSIP will be characterised in the draft DCO as 'Associated Development'. For the purposes of the PEIR, the two NSIPs and the Associated Development are assessed as a single 'project'.

4.9 The Associated Development broadly comprises:

- A43 access;
- a lorry park;
- underpass under Northampton Road;
- landscaping;
- habitat creation; and,
- other minor highways works and public rights of way alterations.

The Proposed Development

4.10 The Proposed Development is described in more detail, particularly at Chapter 5 of the PEIR and the Parameters Plans. An overview of the proposals is also provided in the short consultation summary document.

4.11 The Proposed Development comprises:

- Up to 702, 097 sq m (GEA) of rail connected and rail served warehousing and ancillary service buildings including a lorry park, terminal control building and bus terminal;
- An intermodal freight terminal with direct connections to the Northampton Loop Line, capable of accommodating trains of up to 775m long, including up to 3 gantry cranes, container storage, a train maintenance depot and facilities to transfer containers to Heavy Goods Vehicles (HGV);

- An express freight terminal with direct connections to the West Coast Main Line, capable of accommodating trains of up to 240m long, a freight platform with associated loading and unloading facilities;

- New road infrastructure including a new separated access point on the A34 (T), an internal site underpass (under Northampton Road) and improvements to the wider strategic highway network including Junction 15a of the M1 Motorway and necessary utilities infrastructure;

- Structural earthworks and demolition of existing buildings and structures;

- Strategic landscaping and open space including alterations to public rights of way the creation of new ecological enhancement areas and publicly accessible open areas, flood attenuation (at both the Main SRFI Site and J15a of the M1), and the partial diversion of the Milton Malsor brook.

4.12 A 'parameters approach' has been applied to the Proposed Development whereby the development is described in terms of clearly defined parameters inside which future detailed development will be undertaken. This is because flexibility is required as the development will be phased over a number of years and the need to accommodate changing occupier requirements. This approach is common in respect of large scale infrastructure projects in order to ensure the maximum extent and size of development for which consent sought is identified and assessed whilst enabling flexibility at the detailed design stage.

4.13 The Parameter Plans identify those elements of the Main SRFI Site which are to be fixed or controlled as part of the DCO (i.e. the location of development plots and the framework of green infrastructure) and those elements which are subject to restrictions. The Parameters Plans which set out the design parameters are:

- **Parameters Plan** (Appendix 1) – sets out extent of maximum development that can be achieved on site including minimum floor levels, building heights, etc.

- **Green Infrastructure Plan** (Appendix 2) – sets out the framework of green infrastructure and mitigation including landscape strategy and minimum bund heights/maximum plateau heights, etc.

4.14 Table 4.1 below and overleaf provides an overview of the parameters to be fixed as part of the DCO:

Table 4.1: Parameters Table (Main SRFI Site)

Zone	Use / Infrastructure	Minimum number of units	Maximum number of units	Maximum plateau level (m AOD)	Maximum building height (metres above finished floor level)
1	B8 (Warehousing)	2	4	77.540	18.5

1a	Truck Parking	1	2	77.540	6.5
2	B8 (Warehousing)	1	3	80.300	18.5
3	B8 (Warehousing)	1	4	82.500	18.5
4	B8 (Warehousing)	1	3	84.250	18.5
5	B8 (Rail Connected Warehousing)	2	3	90.700	18.5
5a	B8 (Rail Connected Warehousing)	1	2	88.550	18.5
6	Maintenance Depot	1	1	92.500	18.5
6a	Terminal Control Building & Gantry Crane	1	1 building & 3 gantry cranes	91.300	27 (Gantry Crane)
7	Express Freight Terminal	1	1	94.330	4 (Canopy)
-	Bunds	-	-	98.0 (minimum height)	-
Total gross external floorspace (sqm) 702,097					

4.15 An illustrative masterplan (Appendix 3) has also been produced, which demonstrates one way in which the Rail Central proposals could potentially come forward, in accordance with the controls and restrictions set out within the Parameters Plans.

4.16 The following section provides further details in respect of the proposals individual component parts:

Up to 702, 097 sqm (GEA) of rail connected and rail served warehousing and ancillary service buildings including a lorry park and bus terminal;

4.17 The Proposed Development seeks up to 702,097 sqm (GEA) of warehousing and a small amount of space for ancillary buildings relating to the freight terminals, storage areas and other ancillary buildings and structures. Provision has been made for up to three of the larger warehouse units to be capable of direct rail siding access alongside the buildings, avoiding the need for any intermediate road movements between train and warehouse; whilst the remainder will be served by a common-user, open-access intermodal facility.

4.18 Within Rail Central, a lorry park with capacity of 149 HGV spaces will be provided along with a bus terminus. The terminus will provide turning, pick up/drop off areas and layover space for buses serving the site.

4.19 The final and detailed configuration of the warehousing development plots would be determined in response to market demand but the expectation is that the development would comprise larger floorspace buildings. The detailed approval of these buildings will be managed by the Local Authority through the discharge of requirements included within the DCO, which will require the submission and approval of details including access, layout, appearance, landscaping and scale.

4.20 The DCO Application identifies five development plots within the site which are shown on the Parameters Plans. The Parameters Plan identifies and defines the maximum floorspace, building plateau levels, and building heights. The development plots provide for ancillary buildings and structures to support warehousing including gate-houses, sprinkler tanks, substations, storage tanks and other necessary ancillary structures. The developed areas will also provide car parking, HGV tractor and trailer parking and cycle parking. Security fencing would also be provided.

4.21 The Illustrative Masterplan illustrates one way in which the Main SRFI Site can potentially be developed in accordance with the Parameters Plans.

Intermodal freight terminal with connections to the Northampton Loop Line, container storage and parking

4.22 A freight terminal is proposed, to be connected to, and immediately west of the NLL, which handles most of the freight and non-express passenger services at present.

4.23 The freight terminal is designed to accommodate trains of up to 775m in length (the maximum length of UK intermodal trains). The freight terminal, through the provision of eight rail sidings (all capable of accommodating a 775m length train) would enable the transfer of the freight from road to rail, and vice versa.

4.24 Trains will be able to access from either direction on the main line, with trains passing directly into or alongside the intermodal terminal to facilitate fast turnaround of trains once off the main line. Provision has been made in the track layout design to allow both diesel- and electrically-hauled trains to access the sidings.

4.25 In addition to serving operators of Rail Central, the freight terminal would be an open-access terminal which would serve a wider market, enabling the transfer, storage and distribution, as required of containers and other goods from external customers. Areas for container storage and a parking area are proposed at and adjacent to the rail terminal.

4.26 In order to facilitate the loading and unloading of containers, the freight terminal will accommodate up to four overhead gantry trains operating on rails and with the ability

to span across all six rail sidings and the majority of the intermodal terminal apron areas. In addition reach stacker cranes will be utilised to transfer containers to temporary storage areas, where containers will be stored at a maximum height of 12m over 20,000 sqm area.

4.27 The intermodal terminal facility also including a Railway Control Centre (RCC) providing administration and security facilities as well as amenities for staff and visitors and a traction and rolling stock depot, which will enable the trains to be stabled, maintained and fuelled on site rather than at off-site locations.

Express freight terminal with connections to the WCML, with loading/unloading platform

4.28 In addition to the intermodal facility, (and uniquely for a SRFI), Rail Central also makes provision for access to and from the WCML itself (known historically as the London to Rugby Line), mainly for a smaller number of express freight services, similar to those used by the Royal Mail between London, Warrington, Glasgow and Newcastle (and more recently used by Eddie Stobart, Sainsburys and TNT). The express facility would allow high speed trains to arrive on site, quickly discharge and load roll cages or palletised goods (within windows as short as 20-30 minutes) before departing again in the same or opposite direction.

4.29 Access would again be provided from both directions of travel for diesel and electrically-hauled express freight trains, the loop off the main line being of sufficient length to allow trains to enter and depart at higher speeds. A cross-dock platform would allow trains and goods vehicles to transfer goods quickly between modes. This facility would allow freight users to benefit from faster transits than possible with road haulage or traditional rail freight services.

4.30 Internal rail connection points will also be created within the site between the intermodal terminal and express terminal.

Rail Connections and Ancillary Rail Development

4.31 As explained above, Rail Central would connect into both the WCML Fast and Slow Lines in both directions of travel, using diesel or electric traction, for trains of up to 775m train length, with internal links between these connections to allow maximum flexibility of routing trains to and from the Main SRFI Site. In the event that either side of the WCML is closed for maintenance or due to an incident, scope will then exist for Network Rail to reroute trains via the unaffected side of the WCML as slots become available.

4.32 The design of the main line connections into the WCML and the NLL lines can be used by all the types of freight train anticipated to use the SRFI (intermodal, conventional and express), the nature of the connections having been designed to reflect the respective emphasis of traffic movements and to integrate these into the pattern of

the main line services. Connections consist of main line crossovers (allowing trains on the main line to cross between main line tracks as required to reach the connection points) and new connections on and off the main line into the SRFI.

4.33 This configuration serves to maximise the potential of Rail Central's connectivity into the Strategic Freight Network (SFN). It also demonstrates that Rail Central benefits from a range of routing options in order to ensure that the rail services offered at the SRFI are effective, efficient and resilient.

4.34 Rail Central would also include a number of ancillary rail-related facilities which are unique to this SRFI:

- A Traction Maintenance Depot – to allow trains to be stabled, maintained and fuelled on site rather than at off-site locations. This would reduce the need for empty positioning movements to and from the Main SRFI Site, maximising use of available main line capacity and the efficiency of rail freight services. This unique facility for a SRFI would also provide a location where train crew could sign on and sign off from each work day as required. With the rationalisation of former maintenance depot facilities at Rugby and Wolverton in recent years, this facility would be able to tap into a pool of skilled railway staff, which may have been (or may be) displaced from other facilities in the surrounding area.

- A gatehouse at the HGV entrance to the Intermodal Terminal – this would accommodate operational processes necessary to ensure goods are checked and secure. This not only protects against theft but also forms part of the Government's mandatory security regime for terminals sending freight through the Channel Tunnel.

- A Railway Control Centre (RCC) for the Intermodal Terminal and railway operations on site providing administration and security facilities as well as amenities for staff and visitors.

- Bunded fuelling facilities for reachstackers, internal movement vehicles or locomotives.

4.35 In terms of freight capacity, the draft Rail Report confirms that, at start up and based on equivalent UK terminal operations, Rail Central is expected to handle four trains per day in its earlier phases and has sufficient development floorspace to create the equivalent of thirteen intermodal trainloads per day. In practice, this quantum of freight traffic would be distributed between intermodal services and other emerging service types (i.e. conventional wagon and express).

New road infrastructure

4.36 The Proposed Development includes a number of road infrastructure elements, which can be summarised as follows:

(A) The Main SRFI Site

4.37 The creation of a grade separated roundabout on the A43 (T) comprising a single 7.3m wide carriageway with access to the four slip lanes and new dual carriageway descending into the Main SRFI Site.

4.38 The provision of an estate road to serve the Main SRFI Site with an underpass beneath the existing Northampton Road and an emergency access to Northampton Road which would comprise a simply priority junction. It will be security gate controlled to prevent vehicle access other than in defined emergency situations. It will allow pedestrian and cycle access.

(B) J15a of the M1

4.39 The improvements proposed to J15a of the M1 Motorway are confirmed at the plans in Appendix 4 and 5 of this statement and comprise the following:

- Pre-development works to facilitate carriageway widening and configuration, including development of a construction compound to the east of the junction;
- Widening and signalisation of existing northern roundabout;
- Widening of A5123 approach; widening of M1 southbound off-slip approach;
- Widening of A43 northbound approach to northern roundabout;
- Reconfiguration of existing southern roundabout to provide signalised T-Junction;
- Provision of two lane free flow slip on A43 SB;
- Provision of new link road between southern junction to M1 northbound on and off slips;
- Widening of A43 northbound approach to southern junction; and
- Provision of ecological enhancement to the south-west of the junction, and landscaping around the junction.

(C) Other Highways Works

4.40 Other off site highways works proposed are as follows:

(a) Junction 16 of the M1 (M1/ A4500 (east to Northampton)/ A45 (west to Daventry))

– Provision of traffic signal control;

– Reconfiguration of road markings to provide three lanes on circulatory carriageway;

- Widening of northbound and southbound off-slip approaches; and
- Widening of A45 approach.

(b) Junction 15 of the M1 (M1/ A45 (north to Northampton and Wellingborough)/ Saxon Avenue/ A508, Northampton Road (south to Milton Keynes))

- Widening of circulatory carriageway to provide three lanes from A45 up to existing M1 bridge

(c) A4500, Weedon Road (east)/ Tollgate Way/ A4500, Weedon Road (west)/ A5076, Upton Way

- Provision of additional lane on A4500 eastbound approach.

(d) A5076/ A5123/ Upton Way Roundabout (Pineham Park) (Dane Camp Way)

- Widening and reconfiguration of road markings on Upton Way approach;
- Reconfiguration of road markings on Danes Camp Way approach and on circulatory carriageway, additional lane on A5123 approach and on circulatory carriageway, and additional lane on Upton Way exit.

(e) A5076 (west)/ Hunsbury Hill Avenue/ Hunsbarrow Road/ A5076, Danes Camp Way/ Hunsbury Hill Road

- Provision of traffic signal control on both A5076 approaches (and circulatory carriageway);
- Provision of additional lane on both A5076 approaches;
- Provision of additional lane and merge on both A5076 exits; and
- Provision of additional lane on both northern and southern circulatory carriageway.

(f) Towcester Road/ A5076, Danes Camp Way/ A5123, Towcester Road/ Mere Way/ Tesco Access

- Provision of additional lane and merge on Towcester Road (westbound exit);
- Provision of additional lane on A5076, Danes Camp Way approach;
- Provision of local widening and traffic signal control (including on circulatory carriageway) on A5123, Towcester Road approach;
- Provision of additional lane and merge on Mere Way exit; and

- Provision of extension to right turn lane on Mere Way approach.

(g) A45, Nene Valley Way (south); A428, Bedford Road (west)/ A5095, Rushmere Road/ A45, Nene Valley Way (north)/ A428, Bedford Road (east)

- Widening of circulatory carriageway (between A45 (south) and A428 (west) by reducing central island; and
- Widening A428 (east) approach.

(h) A45, Nene Valley Way (south); A43, Lumbertubs Way/ A45, Nene Valley Way (north)/ Ferris Row

- Reconfiguration of road markings to provide three lanes on circulatory carriageway.

(i) Tove Roundabout (A43, Towcester Bypass (southwest)/ Towcester Road/ A5, (north)/ A43, (northeast)/ A5, Watling Street (southeast))

- Provision of additional lane on A43 (southwest) approach;
- Widening and reconfiguration of Towcester Road approach and A5 (north) exit;
- Provision of additional lanes on A5 (north) approach); and
- Widening of circulatory carriageway between A5 (north) and A5 (south) to provide additional lane on circulatory carriageway by enlarging central island.

(j) Abthorpe Roundabout (Abthorpe Road/ A43, Towcester Bypass (north)/ Brackley Road/ A43, Towcester Bypass (south))

- Provision of additional lane on A43 (north) approach;
- Realignment of A43 (north) and Brackley Road; and
- Reconfiguration of road markings on Brackley Road and circulatory carriageway.

(k) A5076, Upton Way (south)/ Telford Way/ A5076, Upton Way (north)/ Walter Tull Way/ Dustan Mill Lane

- Provision of additional lane on both Upton Way approaches;
- Provision of additional lane and merge on both Upton Way exits; and
- Widening and reconfiguration of road markings on circulatory carriageway.

(l) A5076, Upton Way (south)/ High Street/ A5076, Upton Way (north)/ Dustan Mill (Stub)

- Provision of additional lane on both Upton Way approaches;
- Provision of additional lane and merge on both Upton Way exits; and
- Widening and reconfiguration of road markings on circulatory carriageway.

(m) A45 (south)/ Eagle Drive/ A45 (north)/ Caswell Road

- Provision of traffic signal control on Caswell Road approach (and circulatory carriageway).

(n) A508, Harborough Road (south)/ A5199, Welford Road/ A508, Harborough Road (north)/ Cranford Road/ Kingsland Avenue

- Widening on A5199 approach.

4.41 The need for mitigation works at three further junctions has been identified within the Transport Assessment, and these junctions have therefore been incorporated within the proposed Order Limits. The additional three junctions and the proposed minor mitigation works are as follows:

(o) A45/ St John's Road

- Signage scheme proposed to include junction ahead and warning signs and countdown markers as well as high friction surfacing for northbound vehicles on the A43.

(p) A43 Northampton Road

- Signage scheme proposed to include junction ahead warning signs with associated countdown markers.

(q) Pedestrian/ Cycleway along Northampton Road and between Barn Lane to the Junction of Collingtree Road

- The widening of the existing footway along Towcester Road to accommodate a footway/cycleway. The proposed footway/cycleway will measure 3 metres in width with a minimum 0.5m wide margin along the carriageway edge. The carriageway of Towcester Road/Northampton Road will be realigned in sections with a minimum width of 6.5m;
- A proposed 2 metre wide footway to be provided on the nearside corner of the Towcester Road/Rectory Lane junction to facilitate pedestrian movements, a dropped kerb crossing point with tactile paving will be provided on Towcester Road immediately south of the junction with Rectory Lane. In addition a dropped kerb crossing with

tactile paving will be provided on Rectory Lane immediately east of the junction with Towcester Road; and

- Extension of the footway along Barn lane to the junction of Collingtree Road.

4.42 An assessment of these minor works has not been included within the technical assessments (apart from Highways – Chapter 9 of the PEIR) due to late identification.

4.43 However, it is considered they are highly unlikely to affect the conclusions reached in other chapters of the PEIR in terms of environmental significance of the Proposed Development, due to the nature of works, and their location within Highways Land. A full assessment of these junctions will be included in the assessment undertaken for the final DCO submission.

Structural earthworks and demolition of existing structures

4.44 The Main SRFI Site is undulating and some changes in levels are required which involve earthworks to create development plateaus or plots within development zones identified in the Parameters Plans

4.45 The built development zones would potentially create very large buildings, and earthworks are proposed to both create level plateaus for these buildings but also help create bunding and screening to limit the visual impact of the Proposed Development from viewpoints and receptors outside the Main SRFI Site. These bunds have been designed as landscaped, natural features and will effectively define the northern and central aspects of the Proposed Development. Overall, a balance of cut and fill is achieved to omit the need for import or export of material from the Main SRFI Site.

4.46 A number of existing properties have been identified that would need to be demolished for the Proposed Development; these include:

- Petrol Filling Station:
  - Main Building
- Manor Farm:
  - Main House
  - Garage
  - Stables
  - Warehouse 1 (comprised of two structures)
  - Warehouse 2 (comprised of three structures)
- Flowercraft Nursery:

  - Comprised of two houses

- Lodge Farm:
  - North Building (comprised of six structures)
  - Warehouse 1 (comprised of four structures)
  - Warehouse 2 (comprised of two structures)
  - Warehouse 3 (comprised of one structure)
- Rathvilly Farm:
  - Main House
  - Garage
  - Summer House
  - Warehouse 1 (comprised of one structure)
  - Warehouse 2 (comprised of one structure)

Strategic landscaping and open space including alterations to public rights of way and the creation of new ecological enhancement areas and publicly accessible open areas

(A) Main SRFI Site

4.47 The Proposed Development of the Main SRFI Site will inevitably result in the loss of farmland and associated field edge vegetation. It is proposed to offset this through the development of a series of biodiverse and ecologically rich landscape zones to provide a net gain in area of woodland habitat, species rich grassland habitat, wetland habitat and increasing overall length of hedgerow. Although some of this is accommodated within the Main SRFI Site itself, the majority of ecological mitigation will be partly achieved through a 26ha area adjacent to J15a. This mitigates the impact at the Main SRFI Site, though is described in the relevant J15a section below.

4.48 Landscaping provided within the Main SRFI Site will form boundaries between building zones and break up areas of car parking. The landscaped areas will incorporate opportunities for habitat creation and enhancement, as well as leisure opportunities including walks. The landscape areas include publically accessible structural landscape zones (for example around Arm Farm); structural landscape zones (around the development zones) and spine road landscaping.

4.49 The landscape corridors focused around the periphery of the Main SRFI Site and adjacent to internal road corridors are based on the following key design principles:

- To minimise the effect of the Proposed Development (and specifically the Main SRFI Site) on the adjacent landscape character and on views towards the Main SRFI Site through the use of mounding and native structural planting belts.

- To integrate drainage and acoustic mitigation into the design to provide a holistic landscape strategy that responds to the existing site constraints and surrounding receptors.

- To maximise the ecological mitigation within the landscape zones through the retention and enhancement of the existing vegetation framework where feasible.

- To provide connectivity for wildlife through the creation of a matrix of different habitats providing interconnectivity between the different zones and into the wider area. Mitigation will be implemented where required to respond to individual species needs and provide a robust site specific solution.

- To provide connectivity both through the site and into surrounding areas. The development will incorporate a number of diverted footpaths along with new footpath links. Footpaths around the periphery of the site will be placed in broad landscape corridors to retain openness and provide a setting.

- To implement the landscape proposals in accordance with current best practice.

4.50 These principles have been established through a Landscape and Ecological Infrastructure Strategy (LEIS) which is explained and included within the draft Design and Access Statement. An Illustrative Landscape Masterplan for the Main SRFI Site is provided in Appendix 5.2 of the PEIR, and an Ecological Mitigation Plan and Hedgerow and Tree Retention and Removal Plan in Appendix 5.4 of the PIER. These demonstrate the various principles described above and how they would be applied to a typical development layout. Further information in relation to each landscape zone is also provided as part of the separate 15-year Management and Maintenance Plan (M&MP) and is assessed as required within the technical chapters of the PEIR.

4.51 However, as for the main Illustrative Masterplan, these demonstrate ways in which the required mitigation could be achieved. The details would be agreed prior to development.

Public Rights of Way

4.52 There are three existing footpath routes across the Main SRFI Site that will need to be altered to facilitate the Proposed Development. In order to retain existing connectivity

between Blisworth, Milton Malsor, Collingtree and the Grand Union Canal it is proposed that the existing footpath routes will be diverted. All proposed footpath diversions and new routes to be created are detailed on the PRoW Strategy (drawing no's. 1627-15-109, 1627-15-110 and 1627-15-111).

4.53 Blisworth and Milton Malsor will be linked by a proposed new footpath and cycleway that will provide an off road link between the two villages. The proposed route will run through the centre of the Proposed Development, passing through a landscape corridor as it runs through the Main SRFI Site adjacent to the Northampton Road.

4.54 The route (Ref. KX13) between Collingtree and Blisworth will be diverted around the eastern edge of the Main SRFI Site, crossing the NLL and running down the edge of retained farmland.

4.55 The link (Ref. KX16) between the canal and Milton Malsor will run around the western edge of the Proposed Development within a landscape corridor that will extend along the southern edge of the village. This footpath will from a new link into the diverted footpath running between Milton Malsor and Collingtree.

J15a Works

4.56 Parameters for the proposed works are shown in the J15a Green Infrastructure Plan. Landscape mitigation is proposed primarily in the north of the junction and to the east of the Grand Union Canal, and comprises the retention of existing vegetation (such as around and within the northern roundabout, and south of the M1 and along the edges of the roadway) and additional soft landscaping to the east of the A43 and south of the new slip road. The retained vegetation will be protected during highway works, and new landscaping will be established as soon as possible after works. The areas will incorporate opportunities for habitat creation and enhancement, as well as leisure opportunities including extending existing pathways to link with a right of way. The Illustrative J15a Landscape Plan suggests how the landscape mitigation may be brought forward.

4.57 The J15a Green Infrastructure Plan and the Illustrative J15a Landscape Plan are provided at Appendix 4 and 5.

Ecological Mitigation

4.58 An area for ecological mitigation has been identified to the south-west of the junction, covering approximately 26ha. This is shown in the J15a Green Infrastructure Plan. This will be designed following necessary pre-construction surveys, and is intended to maximise the ecological mitigation within the landscape zones through the retention and enhancement of the existing vegetation framework and field pattern where feasible.

4.59 The J15a Ecological Mitigation Plan (Appendix 5.2 of the PEIR) suggests how the ecological mitigation may be brought forward, though this is dependent on the findings of future pre-development surveys. It is anticipated to include retained vegetation including marshland and woodland, renovated barns for owls and bats, new marshland areas and waterbodies, hedgerows and new vegetation including native trees and shrubs. Ditches alongside hedgerows could create "blueway" links to enhance habitat value. It is intended that the majority of the area could be kept in arable use, as long as

this is non-intensive), with a mixture of overwinter stubble and winter bird crops/cover.

Phasing

4.60 The construction of the site will be undertaken in a phased manner. The precise phasing of works has not been determined and will be subject to occupier requirements and detailed design.

4.61 Indicative phasing of development is set out in Table 4.1 below. There will however be flexibility in the phasing adopted, depending on market requirements. The grade separated junction, spine road through the site, underpass, initial rail connection to the NLL and intermodal area (or part of) will be key aspects of the Proposed Development, and are anticipated to be constructed prior to first operation in 2021. Evidently, construction of these is integral to the operation of the SRFI. The order of other building development in relation to these, however, is only indicative, and there is the potential that some phases may be constructed in parallel. The assessments within this PEIR have assumed a 10-year construction period.

Table 4.1: Indicative Construction Phasing

Phase	Description
1	New Grade Separated Junction on A43
2	Haul Road (Spine Road) from A43 to Underpass on Northampton Road
3	Underpass
4	Haul Road (Spine Road) from Underpass to Intermodal Area
5	Rail connection (NLL) and Intermodal Terminal (or part of)
6	Rail Connected Buildings (units 6 & 7*)
7	Buildings at A43 frontage (units 10, 12, 13*)
8	Rail Connected Building (unit 5*)
9	Buildings east of Northampton Road (units 3 & 4*)
10	Buildings at A43 frontage (units 8, 9, 11*)
11	Buildings east of Northampton Road (units 1 & 2*)
12	Express freight terminal#
13	Train maintenance depot#

*unit numbers are as identified on the Illustrative Masterplan in Appendix 5.2 of the PEIR and are provided only to aid understanding of the locations concerned.

phasing to be determined by user / operator requirements.

4.62 It is currently anticipated that the first stage of works will take an initial construction access from the A43. This will use the former petrol filling station access point. This will allow the establishment of a construction compound to the west of the site. Works will then start with the creation of the Main SRFI Site access from the A43, which will facilitate the main road based access for the construction phase.

4.63 A central haul road will then be created to Northampton Road, to allow works on the underpass to begin. Once complete, this will allow access to the eastern area of the Main SRFI Site. Construction access will then be taken to the eastern boundary and another construction compound created. This will allow works to begin on creating the rail infrastructure for the intermodal terminal. These initial rail works will allow the use of rail for some construction activity, potentially including bulk deliveries or exports. The first phase of rail works will involve the creation of the entire intermodal facility and will provide direct rail access to the Main SRFI Site.

4.64 The creation of development plateau and perimeter bunds will require bulk earth works. These will also be undertaken on a phased basis, although it is likely that this will be limited to one or two main earth work phases, providing levelled and profiled areas for the eastern and western parts of the site. Once each phase is complete, advance landscaping will be provided to maximise maturing time. Precise details of landscaping and timing of delivery will be confirmed after consent has been granted.

4.65 It is possible that the initial buildings will have a direct rail connection requirement, in which case they will be constructed in the eastern area of the Main SRFI Site. For occupiers with an indirect rail requirement or an anticipated future rail requirement, the site location will depend on the scale of the building and the occupiers' preference for location. This may involve buildings being constructed on the western area of the Main SRFI Site.

5. Relevant Legislation

5.1 This section summarises the legislative framework, including the PA2008, which provides the context for the DCO process, and the Environmental Impact Assessment (EIA) framework, this then sets the framework for summarising the relevant national policy and guidance position, which is undertaken in Section 6 of this Statement.

Planning Act 2008

5.2 The PA2008 received Royal Assent on 26 November 2008, and has since been amended by The Localism Act 2011, The Growth and Infrastructure Act 2013, and The Infrastructure Act 2015.

5.3 The PA2008 (as amended) is primary legislation that establishes the legal framework for applying for, examining and determining applications for Development Consent, taking account of the policy in the NPS. The PINS will appoint the Examining Authority in respect of a NSIP for which a Development Consent application is required to be made.

5.4 The relevant SoS for the type of project proposed is responsible for making the final decision on the acceptability of such applications, having regard to the recommendations of the Examining Authority, and is responsible for the issuing of the DCO that will enable the development to proceed. In this case, the relevant SoS is the SoS for Transport. The DCO will be subject to various planning requirements that restrict, direct and control the manner in which development can proceed.

5.5 Section 104(2) of the PA2008 requires the Examining Authority to take into account the following when considering an application for a DCO:

- any NPS that has effect in relation to development of the type to which the application relates;
- any local impact report (LIR);
- any matters prescribed in relation to development of the description to which the application relates; and
- any other matters which the SoS considers are both important and relevant to its decision.

5.6 Section 104(3) explains that the SoS must decide applications in accordance with the relevant NPS, save in certain limited circumstances. These circumstances are confirmed in Section 104(4) to Section 104(8) of the PA2008 and note that decisions will be made in accordance with the NPS, except where this would:

- lead to the United Kingdom being in breach of its international obligations;
- be in breach of any duty imposed on the Panel or Council, by or under any enactment;

- be unlawful by virtue of any enactment;
- result in the adverse impact of the development outweighing its benefits; or
- be satisfied that any condition prescribed for deciding an application otherwise than in accordance with a national policy statement is met.

5.7 A particular feature of the PA2008 is the need for prior consultation of a proposed development with all potentially affected stakeholders.

Guidance and Advice Notes (PA2008)

5.8 Guidance has been prepared by Government in relation to the processes of preparing and examining applications under the PA2008. Some of the guidance is non-statutory, but pursuant to section 50(3) of the PA2008, project promoters must have regard to guidance about how to comply with the pre-application procedure under Chapter 2 of Part 5 of the PA 2008. Further, the SoS must have regard to the extent to which such guidance has been considered and followed when deciding whether to accept an application for examination (section 55(5A)(b) and 55(4)(c) of the PA2008).

5.9 In addition to the guidance published by Government, the PINS has produced seventeen Advice Notes that are intended to assist individuals and organisations (including local communities) to engage more effectively in the process for making, commenting or deciding upon applications for Development Consent.

EIA Directive

5.10 The legislative framework for Environmental Impact Assessment (EIA) is provided by European Directive (the EIA Directive) 2011/92/EU as amended by European Directive 2014/52/EU (April 2014) on the assessment of the effects of certain public and private projects on the environment. Directive 2011/92/EU codified the earlier European Directives 85/337/EEC, 97/11/EC and 2009/31/EC. Member States were required to bring into force the laws, regulations and administrative provisions necessary to comply with the 2014/52/EU Directive by 16 May 2017 (further information on this issue, and its relevance for the Proposed Development, is provided below). The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 provide the relevant regulations.

5.11 The EIA Directive requires that EIA be undertaken in support of an application for Development Consent for certain types of project. For projects which require Development Consent under the PA 2008, the requirements of the EIA Directive have been transposed into UK legislation by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the 'EIA Regulations).

5.12 The primary objective of the EIA process is to ensure that Member States adopt all measures necessary to ensure that projects likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location, are made subject to an assessment with regard to their effects. The results of consultations and

information gathered pursuant to the EIA procedure must be taken into consideration in the Development Consent procedure.

5.13 The EIA Regulations set out the requirements and provisions for Screening (deciding if an EIA is required), Scoping (setting out the scope for the EIA) and the submission of an Environmental Statement (ES) that reports the EIA process and its findings. A Scoping request was made by the Applicant (December 2015) and PINS has provided its formal Scoping Opinion (January 2016) in response to this exercise. It was under the EIA Regulations 2009 (the 2009 Regulations) that the Scoping Report and subsequent Scoping Opinion for the Proposed Development were prepared and issued.

5.14 Since this time, the Applicant has undertaken informal consultation with the local community and statutory consultees and refined the project design during which time the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the 2017 Regulations) have come into force. The Applicant has taken a robust and conservative approach and has expanded the environmental topics and information to be included in the Environmental Statement, despite it being considered that the Project falls within the remit of the transitional provisions of the 2017 Regulations. The Proposed Development has accordingly been assessed pursuant to the 2017 Regulations. The EIA is therefore being undertaken on a voluntary basis under the 2017 Regulations and, following discussions with the Planning Inspectorate (PINS) a notification pursuant to Regulation 8(1)(b) of the 2017 Regulations has been submitted to PINS and the Secretary of State.

5.15 The EIA Regulations impose procedural requirements for carrying out EIA for DCOs that fall to be considered as 'EIA development' under the EIA Regulations. The schedules to the EIA Regulations contain the following categories of projects:

- Schedule 1 projects: These are always EIA development (for example, new nuclear power stations); and
- Schedule 2 projects: These are only EIA development if the individual project is likely to have significant effects on the environment.

5.16 The Proposed Development is of a scale that falls within Schedule 2 of the EIA Regulations 2017. The EIA Regulations 2017 provide that where development of a type listed within Schedule 2 is likely to give rise to significant environmental effects, the SoS must not make an order granting Development Consent unless he/she has first taken the environmental information into consideration, and must state in his/her decision that he/she has done so.

5.17 Environmental information will be submitted by the Applicant in support of the DCO application in the form of an Environmental Statement. A Preliminary Environmental Information Report has been prepared for the purposes of this consultation exercise, which brings together the environmental information which has been compiled by the applicant and is considered to be reasonably required to develop an informed understanding of the likely significant effects of the Proposed Development.

The PINS Advice Note Seven: EIA – Process, Preliminary Environmental Information

5.18 Republished in December 2017 (version 6) of the PINS Advice Note Seven provides advice on elements of the EIA process during pre-application. This is namely in respect of screening and scoping proposals for EIA and assisting applicants in understanding the role of preliminary environmental information.

5.19 Furthermore, the Advice Note also details matters relating to the production of REIR's and the preparation of ES's.

The Habitats and Wild Birds Directives

5.20 EC Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (known as the Habitats Directive) is intended to protect biodiversity by requiring Member States to take measures to maintain or restore natural habitats and wild species listed in the Annexes to the Directive at a favourable conservation status. It provides for robust protection for those habitats and species of European importance.

5.21 EC Directive 2009/147/EC on the conservation of wild birds (known as the Birds Directive) provides a framework for the conservation and management of, and human interactions with, wild birds in Europe. It sets broad objectives for a wide range of activities.

5.22 In England and Wales, the Habitats Directive is implemented under the Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations) and the Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007.

5.23 The provisions of the Birds Directive are implemented through the Wildlife and Countryside Act 1981, the Habitats Regulations and the Offshore Marine Conservation (Natural Habitats & c.) Regulations 2007, as well as other legislation related to the uses of land and sea.

5.24 Under this legislation a network of protected areas (the Natura 2000 network) has been established. These are Special Areas of Conservation (SAC), for habitats and species, and Special Protection Areas (SPA), for birds. The Habitats Regulations require that, where the likelihood of a significant effect on a Natura 2000 site cannot be excluded (either alone or in combination with another plan or project), a competent authority must undertake an Appropriate Assessment as part of the Habitats Regulations Assessment (HRA) process. The Habitats Regulations state that it is the developer's responsibility to provide sufficient information to the Competent Authority to enable them to assess whether there are likely to be any significant effects and to enable them to carry out the appropriate assessment, where necessary.

5.25 The Habitats Regulations provide protection for certain species of plants and animals onshore (those species listed in Schedule 2 and Schedule 5 of the Regulations respectively), referred collectively as European Protected Species (EPSs), and their breeding sites or resting places. These Regulations set out the activities that are prohibited, such as deliberate disturbance or creating damage to a breeding place. The Regulations also provide for licences to be granted for certain operations, such as proposed developments that may affect protected species, subject to there being no satisfactory alternative, and subject to the action authorised not being detrimental to

the maintenance of the population of the species concerned at a favourable conservation status in their natural range.

5.26 If disturbance cannot be avoided then an application for an EPS licence would need to be made to Natural England. The EPS licence will be pursued separately to the DCO consenting process. If necessary a Letter of No Impediment (LONI) will be provided to the Planning Inspectorate to demonstrate that Natural England, the licensing authority, has considered the issues relating to protected species, and to provide reassurance that there are no reasons why an EPS licence could not be granted in due course.

The PINS Advice Note Ten: Habitat Regulations Assessment Relevant to Nationally Significant Infrastructure Projects

5.27 Republished in November 2017, Version 8 of Advice Note Ten provides some clarification on how the assessment matrices should be prepared by applicants. Furthermore, the Advice Note also confirms how these matrices will be used to inform the decision making process.

5.28 When preparing applications for NSIPs under the PA 2008, applicants are required to consider the potential effects of the application on protected habitats. If an NSIP, when taken alone or with existing and known future projects, is likely to affect a European site, there is a requirement on the applicant to provide a report showing that the site(s) that may be affected together with sufficient information to enable the competent authority to make an appropriate assessment if required.

5.29 The PINS Advice Note Ten therefore provides advice for applicants in relation to the preparation of the required assessment report and the PA 2008 processes relating to Habitats Regulations Assessments.

Summary

5.30 This Section has provided an overview of the legislative position, covering the context for the preparation and determination of DCO applications. Additionally, it has also identified the legislative framework for the preparation of EIA.

5.31 Section 6 of this Statement confirms the national policy position, for which this NSIP will be determined against.

6. Relevant National Policy

6.1 This section sets out the relevant national policy position against which this NSIP application will be determined against. Paragraph 1.1 of the NPS sets out the need for, and Government policies to deliver development of NSIPs on the national road and rail networks in England.

6.2 The thresholds for nationally significant road, rail and strategic rail freight infrastructure projects are defined in the PA 2008. Specifically, Section 26 of the PA2008 confirms the relevant thresholds in respect of rail freight interchanges being considered as NSIPs. Section 26(3) of the PA2008 states that the Main SRFI Site must consist of at least 60 acres of land within England. Furthermore, Section 26(4) of the PA 2008 also confirms that for rail freight interchanges to be considered as NSIPs, the development must be capable of handling consignments of goods from more than one consignor and to more than one consignee and handle at least four trains per day. In respect of the proposed Highways Works, the PA 2008, confirms the thresholds for determining whether Highways Works comprise an NSIP in their own right. In this regard, Section 22(4)(b) confirms that Highways Works should be considered an NSIP where *"…the construction or alteration of a highway, other than a motorway, where the speed limit for any class of vehicle is expected to be 50 miles per hour or greater, is 12.5 hectares".*

6.3 On this basis, the Proposed Development constitutes a NSIP and requires Development Order Consent. In accordance with Section 104(2) of the PA 2008 the Proposed Development needs to be determined against the appropriate National Policy Statement, which has effect in relation to the development proposed. The relevant National Policy Statement in this context is the NPS.

National Policy Statement

6.4 NPS guide the decision-making process for applications for Development Consent. Sector-specific NPS are produced by the relevant Government Departments and set out national policy for NSIPs. They provide the framework within which the Examining Authority will make their recommendations to the SoS and include the Government's objectives for the development of NSIPs. The NPS define the national need for certain types of infrastructure and the issues to be considered by the Examining Authority when assessing whether a location is acceptable for the type and scale of development proposed. Each NPS therefore sets out the considerations to be taken into account when determining applications, the approach to the mitigation of impacts and the establishment of design criteria.

National Policy Statement for National Networks (December 2014)

6.5 The NPS is the principal source of policy guidance for the Proposed Development and will form the primary basis for decision-making by the SoS. The Proposed Development will therefore be determined in accordance with the policy framework provided in the NPS, taking into account relevant representations made.

6.6 The NPS was designated in accordance with Section 5(4) of the PA2008 (as amended) on 14 January 2015. It sets out the Government's policy for the delivery of nationally significant road and rail projects in England, including the development of SRFI.

6.7 As confirmed in Paragraph 1.1 of the NPS and the introductory text to this section of the Planning Statement, the NPS is relevant to the Proposed Development and sets out the assessment principles that should be considered in the EIA.

6.8 The NPS is split into five parts, each of which is discussed in detail below:

Part 1 – Purpose and Scope

6.9 The NPS sets out the policies and need for the development of NSIPs on the national road and rail networks in England. This was designated in accordance with Section 5(4) of the PA 2008 (as amended) on 14 January 2015.

6.10 It confirms that the NPS provides the planning guidance for NSIPs on rail networks and is the basis for examination by the ExA and decisions by the Secretary of State. The Secretary of State will use the NPS as the primary basis for decision making regarding development consent applications for NSIPs.

6.11 The NPS has been subject to an Appraisal of Sustainability (AoS) which found no significant adverse effects of the NPS' policies and noted that the nature of the effects will be dependent upon the precise sensitivity of locations for development[3].

6.12 It is recognised that the Government's chosen policy set out in the NPS provides the best balance of their economic, environmental and social objectives[4].

Part 2 - The need for development of the national networks and Government's policy

6.13 The NPS's summary of need[5] clearly identifies that the delivery of national networks will contribute to meeting England's long-term social, economic and environmental needs. This is to be achieved through networks with capacity, connectivity and resilience which can support economic activity and growth and create jobs.

6.14 The NPS also identifies that the Government will deliver networks which support and improve journey quality, reliability and safety and that support environmental goals and a low carbon economy. It also underscores the Government's strategic objectives identify the promotion of national networks that can join up and link communities effectively.

6.15 However, in order to address the on-going government policy objectives, and satisfy new market demand in the most appropriate way, the NPS confirms a need exists for more rail served warehousing space, given the relatively small proportion of warehousing in the area which is rail served, either by intermodal terminals or directly-connected warehouses. The existing SRFI will only have a finite capacity to expand floorspace and/or rail freight interchange facilities, such that further sites such as Rail Central are needed to increase both the capacity and the catchment area of the

[3] Paragraph 1.10
[4] Paragraph 1.11
[5] Page 9

network, bringing rail access closer to more local companies than is possible from these existing sites alone.

6.16 Paragraphs 2.42 – 2.58 identify the explicit need for the development of SRFIs in England. SRFIs are noted as a key element for reducing user costs of moving freight and play an increasingly significant role in driving economic growth[6]. The logistics industry is now required to locate and develop new facilities that are situated alongside major rail routes, close to major trunk roads and near to the areas consuming the goods[7].

6.17 The NPS identifies that SRFIs play a role in meeting the changing needs of the logistics sector and reducing the trip mileage associated with freight movements. The current siting of many rail freight interchanges are considered to provide no opportunity for expansion, lack warehousing and are not in a convenient location for the modern logistics industry.

6.18 The need for SRFI developments to reduce the dependence on road haulage will increase as a result of additional capacity at Felixstowe North Terminal and the construction of London Gateway[8]. Rail freight forecasts (see Table insert below) have been produced with Network Rail and these are considered robust and have been accepted by the Government for planning purposes.

Table 3: Rail freight forecasts to 2023 and 2033: tonne km (Great Britain)

	Billion tonne km			
	2011	2023	2033	Compound annual growth 2011 to 2033
Solid fuels	7	4	3	-3%
Construction materials	4	4	4	1%
Metals and ore	3	3	3	0%
Ports: Intermodal	5	11	16	5%
Domestic: Intermodal	1	7	13	12%
Other	4	4	4	0%
Total	23	33	44	3%

Source: Network Rail, *Freight Market Study*, published 31 October 2013

6.19 The NPS identifies that these figures demonstrate the need for large SRFIs across the regions and that these are likely to attract substantial business[9]. The forecasting process undertaken by Network Rail, as endorsed by the NPS, has taken account of the Rail Central proposals as part of the quantum of additional SRFI capacity expected to be developed over the next 30 years.

[6] Paragraph 2.42 and Paragraph 2.44
[7] Paragraph 2.45
[8] Paragraph 2.48
[9] Paragraph 2.50

6.20 With regards to sustainability, the NPS identifies that rail freight, although having environmental advantages, will produce local impacts regarding land use and increased road and rail movements which is important to minimise[10].

6.21 An important consideration for SRFIs is the availability of a suitable workforce to fulfil the new job opportunities provided by the labour-intensive distribution operations[11].

6.22 In establishing the need for SRFIs, a range of options were considered by the Government including:

- *Reliance on the existing rail freight interchanges to manage demand*
- *Reliance on road-based logistics*
- *Reliance on a larger number of smaller rail freight interchanges[12]*

6.23 These were not considered viable or desirable and it was concluded that a compelling need exists for expanding the network of SRFIs in locations near the relevant business markets and linked to the key supply chain routes. It is identified that the locational requirements and links to rail and road reduce the suitable locations for SRFIs and the scope of alternative sites.

6.24 Further to this, the NPS identifies that existing SRFIs are predominantly situated in the Midlands and North and there are smaller-scale and poorly located intermodal RFIs in London and the South East[13]. This therefore requires SRFI capacity at a wide range of locations to provide flexibility to changing market demands and the challenge of expanding to service London and the South East.

Part 3 – Wider Government Policy on the National Networks

Environmental and Social Impacts

6.25 The Government expects applicants to avoid and mitigate environmental and social impacts in line with the principles set out in the NPPF and the Government's planning guidance. Applicants should also provide evidence that they have considered reasonable opportunities to deliver environmental and social impacts.

6.26 It is recognised that some developments will have some local impacts on noise, emissions, landscape/visual amenity, biodiversity, cultural heritage and water resources. Therefore, whilst applicants should deliver development in accordance the Government policy and in an environmentally sensitive way, including considering opportunities to deliver environmental benefits, some adverse local effects of development may remain.

[10] Paragraph 2.51
[11] Paragraph 2.52
[12] Table 4, Page 22-23
[13] Paragraph 2.57

Emissions

6.27 Due to the Government's legally binding carbon targets and other environmental targets there is a need to shift to greener technologies and fuels, and to promote lower carbon transport choices. Electrification of the railway will also support reductions in carbon. The Government is committed to supporting the switch to the latest ultralow emission vehicles. Impacts on road development need to be seen against significant projected reductions in carbon emissions and improvements in air quality as a result of current and future policies to meet the Government's legally binding carbon budgets and the European Union's air quality limit values.

Safety

Roads

6.28 The UK's roads are amongst the safest in the world. Compared to the 2005-2009 average, fatalities and serious injuries have decreased 25% to 2013. Yet, road deaths and injuries can have tragic social impacts and economic costs of over £14.7 billion a year. The Government's vision is set out in the *Strategic Framework for Road Safety*, and includes highway authorities being empowered to take informed decisions within their area; driver and rider training to give learners the skills they need to be safe on our roads; and tough measures are taken against the minority of offenders who deliberately choose to drive dangerously.

Rail

6.29 The UK's railways are amongst the safest in the world and train accidents are at the lowest level ever. 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 his into account and seek to further improve safety where possible and where there is value for money in doing so by focussing domestic efforts on the achievement of the European Common Safety Targets.

Technology

6.30 New technologies have the potential to make a significant difference to the travel choices and behaviour of individuals. This is evident from improvements and innovations in travel data and information systems, intelligent traffic management and increasing levels of vehicle automaton. The Government will continue to monitor the potential benefits and risks associated with new and emerging technologies, working with industry to enable innovation to enable innovation and support new technologies that have the potential to improve transport as these developments come forward. We need to address current congestion pressures and this will include utilising current technology. However, future uncertainty means it is difficult to predict exactly how much of an impact new technology will have over the coming decades.

Sustainable Transport

6.31 The Government is committed to providing people with options to choose sustainable modes and making door-to-door by sustainable means an attractive and convenient option. This is essential to reducing carbon emissions from transport. On the rail network, Station Travel Plans are a means of engaging with station users and community organisations to facilitate improvements that will encourage them to change the way they travel to the station. Train operators will also be asked to consider

the door-to-door journey in new franchise specification that will aim to facilitate enhanced integration between sustainable transport modes.

Accessibility

6.32 The Government is committed to creating a more accessible and inclusive transport network that provides a range of opportunities and choices for people to connect with jobs, services and friends and family. The Government's strategy for improving accessibility for disabled people is set out in *Transport of Everyone: an action plan to improve accessibility for all.* Applicants are reminded of their duty to promote equality and to consider the needs of disabled people as part of their normal practice. Applicants are expected to comply with any obligations under the Equalities Act 2010. Severance can be a problem in some locations. Where appropriate applicants should seek to deliver improvements that reduce community severance and improve accessibility.

Road tolling and charging[14]

6.33 The Government's policy is not to introduce national road pricing to manage demand on the Strategic Road Network, comprising the motorways and key truck roads for which the Secretary of State is responsible. The Government will consider tolling as a means of funding new road capacity on the SRN. Where tolls or road user charges are proposed as part of a highways project that is the subject of a direction given under section 35 of the Planning Act 2008, the Government will expect the applicant to demonstrate that the proposals are consistent with this NPS, the relevant development plan and relevant statutory transport strategies and plans.

Part 4 – Assessment Principles

6.34 The NPS sets out a range of assessment principles and general policies against which applications regarding national networks infrastructure are to be decided.

6.35 Subject to the detailed policies and protections in the NPS, and the legal constraints set by the PA 2008, the NPS creates a presumption in favour of granting development consent for national network NSIPs that fall within the need for infrastructure established in the NPS.

6.36 When considering such proposed development and balancing the adverse impacts and benefits, the decision maker should take into account[15]:

- Potential economic, social and environmental benefits such as:
  - Job creation
  - Housing
  - Environmental improvement
  - Any long-term or wider benefits

[14] Section 3
[15] Paragraph 4.3

- Potential adverse impacts such as:
  - Any longer-term and cumulative adverse impacts
  - Any measures to avoid, reduce or compensate for any adverse impacts

6.37 With regards to SRFI assessments, a judgement of viability within the market framework will be made, taking account of Government interventions[16].

Environmental Impact Assessment (EIA)

6.38 In relation to the Proposed Development, the NPS acknowledges that National Networks Infrastructure Projects are likely to have significant effects on the environment[17]. The NPS identifies that such proposals must be accompanied by an Environmental Statement (ES) which should include a description of the likely significant effects on the environment, including direct and indirect effects of the proposed development and include measures to mitigate or avoid any adverse effects. The ES should also account for how these interact with the effects of other development and the Examining Authority should consider the cumulative effects even though they may be deemed acceptable on an individual basis[18].

6.39 Evidence available to the ExA should also be provided as this may assist the SoS' decision making and possible mitigation measures required for the proposed development.

6.40 The NPS accepts that it may not be possible to settle all aspects of the Proposed Development in precise detail at the time of the application. In such cases the applicant is advised to set out within the ES, to the best of their knowledge, what the maximum extent of the Proposed Development would be and appraise the potential adverse impacts on this basis to ensure that the potential impacts of the project have been properly assessed[19].

Habitat Regulation Assessment (HRA)

6.41 The NPS identifies that the SoS, prior to granting a DCO, should consider whether a project could have a significant effect on the objectives of a European site or a site to which the same protection is applied[20]. Sufficient information including measures to minimise or avoid effects on a European site should be provided with any applications for development consent. Where there is an adverse effect that cannot be ruled out, a Habitat Directive can be applied for subject to meeting three tests:

- No feasible, less-damaging alternatives exist
- There are imperative reasons of overriding public interest for the proposal progressing

[16] Paragraph 4.8
[17] Paragraph 4.15
[18] Paragraph 4.17
[19] Paragraph 4.19
[20] Paragraph 4.22

- Adequate and timely compensation measures will be implemented to ensure the overall coherence of the network of protected sites is maintained[21]

An Imperative Reasons of Overriding Public Interest case would need to be established regarding human health, public safety or beneficial consequences of primary importance to the environment if negative may negatively affect a priority habitat or species.

Alternatives

6.42 The NPS outlines how to treat alternatives to the development. Further to the alternative considerations outlined as part of the Habitats Directive, the EIA directive requires an outline of main alternatives that have been considered by the applicant and the reasons for the applicant's choice, accounting for the environmental effects. An options appraisal should consider viable and proportionate alternatives, such as those likely to deliver the same infrastructure capacity, and this is not necessary for the Examining Authority and decision maker to reconsider[22].

Design

6.43 Good design in respect of national network projects should produce sustainable infrastructure that is sensitive to place, efficiently uses natural resources and energy in construction and demonstrates, as far as possible, a good aesthetic. However, the NPS notes that particularly regarding the nature of SRFIs, such enhancement of the quality of the area may be limited in extent[23]. It advises that Applicants should take into account both functionality and aesthetics, and that despite limits to the physical appearance of infrastructure including SRFIs, good design can be achieved through sensitive siting and use of materials. Scheme design will be a material consideration in the decision making process[24].

Climate Change Adaptation

6.44 The NPS sets out how it puts Government climate change policy into practice, and how the potential impacts should be taken into account with new development. Given the long-term nature of new network infrastructure, consideration should be given to climate change when planning the location, design, build and operation of proposed development[25].

6.45 Impacts and adaptation measures should be based upon the latest UK Climate Projections available, the Governments national Climate Change Risk Assessment and consultation with statutory bodies. Adaptation measures should also be considered as part of the environmental impact assessment and the environmental statement[26].

[21] Paragraph 4.24
[22] Paragraph 4.27
[23] Paragraph 4.30
[24] Paragraph 4.32
[25] Paragraph 4.40
[26] Paragraph 4.44

6.46 Furthermore, if any proposed adaptation measures themselves give rise to consequential impacts, the Secretary of State should consider the impact in relation to the to the application as a whole and the impacts guidance of the NPS[27].

Pollution and Environmental Protection

6.47 The NPS identifies that projects can affect air, water and land quality, the marine environment and can produce noise and vibration. Such effects may be subject to separate regulation, such as a pollution control framework and only when there is good reason to believe that such separate consents will not be granted should consideration be given by the SoS to refusing consent on the basis of regulated impacts[28].

6.48 Pre-application discussions with the Environment Agency are recommended at least 6 months prior to the submission of an application for development consent and close cooperation with such relevant bodies will be required by the SoS.

Statutory nuisance

6.49 The NPS notes that Section 158 of the Planning Act provides defence for Applicants in proceedings regarding statutory nuisance. Local Authorities still have a duty to inspect the area and to seek to rectify this where necessary. Possible sources of nuisance should be considered in examining an NSIP and how such elements may be mitigated or limited should be passed onto the SoS from the Examining Authority.

Safety

6.50 The NPS sets out the safety considerations for roads and railways. New highway development can contribute to significant safety improvements and reduce accidents. Road safety audits and objective assessments of the impacts should be produced and road safety audits are mandatory for improvements to trunk road highways including motorways[29].

6.51 Steps to minimise risks of death and injury from the scheme and contributions to reduction of road casualties, unplanned incidents and improvements to road safety for walkers and cyclists should be demonstrated by the Applicant. Evidence of reasonable steps to minimise road casualties from the scheme and to contribute to improvements in the safety of the Strategic Road Network should be provided for development consent to be granted.

6.52 The rail industry is required to comply with Common Safety Methods on significant developments under EU legislation. The SoS should expect this to be complied with and that a safety assessment has considered implications to safety throughout development construction, commissioning and operation. Development consent should not be granted unless reasonable steps to minimise risks of death and injury from the scheme, contribute to an improvement in safety levels and acknowledge that railway developments can influence risk levels on and off railway networks[30].

[27] Paragraph 4.45
[28] Paragraph 4.49 and 4.56
[29] Paragraph 4.62
[30] Paragraph 4.72

Security Considerations

6.53 The NPS identifies that the national security considerations apply across all national infrastructure sectors and the Department for Transport works closely with Government agencies to reduce terrorism and other national security threats. Government policy is to ensure that where possible, proportionate protective security measures are designed in to new infrastructure projects at an early stage.

6.54 The NPS identifies that relevant security expert within the Centre for the Protection of National Infrastructure (CPNI) and the Department for Transport should be consulted regarding physical, procedural and personnel security measures and management of the security risks. If such experts consider that the security issues have been adequately addressed, this should not require further consideration[31].

Health

6.55 The NPS sets out that national networks and SRFIs can have direct health impacts due to traffic, noise, vibration, air quality and emissions, light pollution, community severance, dust, odour, polluting water, hazardous waste and pests[32], as well as indirect health impacts such as affecting access to public services or opportunities for cycling and walking[33], and these should be identified in the environmental statement. Measures to deal with such adverse health impacts should be identified by the applicant.

SRFIs

6.56 The NPS sets out the assessment principles regarding SRFIs which consider rail freight's role for business and both rail and non-rail activities. As previously identified in the NPS, it reiterates the essential need for an SRFI to be located close to the market and supply chain, as well as adequately linked to both road and rail networks that can accommodate a modal shift from road to rail. The NPS further identifies that due to this, countryside locations may be required.

6.57 SRFIs should be located on a route with a gauge capability of W8 or more and given their continuous commercial operations, may not be considered suitable adjacent to environmentally sensitive or residential areas, although appropriate mitigation measures may be available to limit the impact.

6.58 With regards to scale and design, the NPS identifies that some buildings on site should be rail connected from the outset and provide intermodal handling and container storage. Rail infrastructure should also allow further rail connections to be provided in the longer term. SRFIs should also be capable of handling a minimum of four trains per day, increasing this where possible, and have the capability to handle 775m trains.

Part 5 – Generic Impacts

6.59 The NPS sets out the impacts which will be relevant to any national network infrastructure and how such impacts should be considered. The Applicant's consideration of environmental effects is set out in the Environmental Statement.

[31] Paragraph 4.77
[32] Paragraph 4.79
[33] Paragraph 4.80

6.60 Topic areas for the impacts that warrant a detailed review in relation to the proposed scheme are outlined in the subsequent sections.

Air Quality

6.61 The NPS identifies that construction and operation phases on projects can worsen air quality and contribute to adverse impacts on human health and protected species, spreading beyond the area of the individual scheme.

6.62 The environmental statement, where the impacts of the project will have a significant effect on air quality, should describe the following:

- Existing air quality levels;
- Forecasts of air quality at the time of opening; and
- Any significant air quality effects, their mitigation and any residual effects, distinguishing between construction and operation phases and accounting for the generated road traffic impact of the project.[34]

6.63 The NPS identifies that the SoS should refuse consent after consideration of mitigation if the scheme results in an area becoming non-compliant with the Air Quality Directive which previously was compliant or the affects non-compliant areas' ability to achieve compliance.

Carbon Emissions

6.64 The NPS notes that the Government has a legally binding framework to cut greenhouse gas emissions by at least 80% by 2050[35] and carbon impacts from transport emissions will be considered as part of the appraisal of scheme options before an application for development consent is submitted. Road project applicants should provide evidence of the carbon impact against the Government's carbon budgets and mitigation measures in design and construction should be presented by the Applicant.

Biodiversity and Ecological Conservation

6.65 Where a project is subject to EIA, the ES should clearly set out any likely significant effects on internationally, nationally and locally designated ecological or geological sites and protected species and habitats. The applicant should demonstrate how the project has used opportunities to conserve and enhance biodiversity and geological conservation interests[36].

6.66 The Biodiversity 2020: A Strategy for England's wildlife and ecosystem services strategy aims to halt overall biodiversity loss and support better places for nature for wildlife and people and should be viewed within the context of climate change.

6.67 Development should avoid significant harm to biodiversity and geological conservation interests and where such cannot be mitigated or avoided, appropriate compensation measures should be sought as a last resort. The SoS should ensure that appropriate

[34] Paragraph 5.7
[35] Paragraph 5.16
[36] Paragraph 5.22-23

weight is attached to designated sites, protected species, habitats and other species of principle importance for the conservation of biodiversity.

International Sites

6.68 The Habitats Regulations provide statutory protection for European Sites and the NPPF states that the following wildlife sites should have the same protection as European Sites:

- Potential and possible Special Protection Areas and Special Areas of Conservation;
- Listed or proposed Ramsar Sites; and
- Sites identified/required as compensatory measures for adverse effects on European sites, potential Special Protection Areas, possible Special Areas of Conservation and listed or proposed Ramsar Sites.

Sites of Special Scientific Interest (SSSIs)

6.69 Many SSSIs are also designated as sites of international importance and protected accordingly and those that are not should be given a high degree of protection. Where development is likely to have an adverse effect on an SSSI individually or in combination with other development, consent should not normally be granted. Exception should only be made where benefits of the development clearly outweigh the impact on the SSSI's features and broad impacts on the network of SSSIs.

6.70 The SoS should aim to ensure harm is mitigated and where necessary, requirements and/or planning obligations should be used to ensure such proposals are delivered.

Regional and Local Sites

6.71 Such sites include LGSs, LNRs and LWSs and Nature Improvement Areas (NIAs) and contribute to the quality of life and well-being of the community. These should be given consideration by the SoS, but should not be used in themselves to refuse development consent given the need for new infrastructure.

Irreplaceable habitats including ancient woodland and veteran trees

6.72 The SoS should not grant development consent for any development that would result in the loss or deterioration of irreplaceable habitats including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the national need for and benefits of the development in such a location clearly outweigh the loss[37].

Biodiversity within and around developments

6.73 The SoS should consider whether the applicant has maximised opportunities to build in beneficial biodiversity and geological features into good design and the SoS may use requirements or obligations to ensure that such features and delivered.

Protection of other habitats and species

6.74 Many wildlife species receive statutory protection and other species and habitats are identified as being of importance for the conservation of biodiversity in England and

[37] Paragraph 5.32

Wales. The SoS should ensure measures have been taken by the applicant to protect such species and habitats from adverse development effects and requirements or planning obligations may be used where appropriate to deliver such protection. Consent should be refused where harm to these would result, unless the benefits of development clearly outweigh the harm to habitats and species.

6.75 Overall, appropriate mitigation measures should be integral to the proposed development and demonstrate good practice during construction and operation. The SoS should consider what requirements should be attached to consent and/or planning obligations to ensure such mitigation measures are delivered. Account should be taken towards any agreements or refusal of licenses between the applicant and Natural England or the MMO.

Waste Management

6.76 The NPS notes that large infrastructure projects may generate hazardous and non-hazardous waste during construction and operation[38] and applicants should set out arrangements for managing any waste produced, whilst minimising the volume produced and the volume sent for disposal unless demonstrating that this is the best environmental outcome.

6.77 The SoS should consider whether an effective process to manage hazardous and non-hazardous waste from the construction and operation of the proposed development has been proposed by the applicant. This should adequately manage waste and waste should not have an adverse effect on the capacity of existing waste management facilities to deal with over surrounding waste arising. Requirements or planning obligations can be used by the SoS to ensure adequate measures for waste management are implemented.

Dust, odour, artificial light, smoke and steam

6.78 The construction and operation phases have potential for producing odour, dust, steam, smoke and artificial light and can have impacts on the amenity of local communities which should be kept to a minimum. These can also cause a common law nuisance or statutory nuisance (covered in Paragraph 4.46 of this statement).

6.79 Such effects from odour, dust, steam, smoke and artificial light should be described in the ES, including:

- *Type and quantity of emissions;*
- *Aspects of the development which may give rise to emissions during construction, operation and decommissioning;*
- *Premises or locations that may be affected by the emissions;*
- *Effects of the emission of identified premises or locations; and*

[38] Paragraph 5.41

- *Measures to be employed in preventing or mitigating the emissions*[39].

6.80 It should be demonstrated to the SoS that steps have been taken for minimising the detrimental impacts from these elements and that necessary mitigation will be implemented and the SoS will decide whether management, such as a Construction Environmental Management Plan (CEMP) may need to be put into place.

Flood Risk

6.81 The NPS sets out that a Flood Risk Assessment (FRA) should accompany applications within Flood Zones 2 and 3 and that climate change may increase the flood risks in susceptible areas where an NSIP is proposed. It is expected that the FRA should consider all forms of flooding arising from the project and account for the impacts of climate change. It should also acknowledge any residual risk following reduction measures and whether the proposal would remain in operation in a worst case flood event.

6.82 Appropriate evidence should be provided to the SoS so that a Sequential or Exception test can be applied. Evidence including a projects drainage system should be provided to the SoS if construction work on the proposed scheme will have drainage implications. Implementation of systems such as Sustainable Drainage Systems (SuDS) and appropriate site layout and design should be demonstrated to mitigate flood risks.

The Historic Environment

6.83 The NPS identifies that construction and operation phases can have adverse impacts on the historic environment and designated and non-designated heritage assets including Listed Buildings, Scheduled Monuments and Conservation areas. This includes not only their physical presence, but also the setting of these assets. Whilst it affords the greatest level of protection to the highest levels of designated asset, it notes that if there is evidence that undesignated assets are equally important, they should be afforded the same level of protection.

6.84 Likely heritage impacts of a proposed scheme should be assessed within the EIA and addressed in the ES, providing a description of the impacts on the heritage asset at a level of detail that is sufficient and proportionate to its importance.

6.85 In terms of the decision making process, there should be a presumption in favour of conservation, and the more significant the asset, the greater that presumption should be. The decision maker should weigh any harmful impacts against the public benefit of the development. However, where there is a high probability that a development site may have undiscovered heritage assets with archaeological interest, there should be a requirement that appropriate procedures are in place for the identification and treatment of such assets discovered during construction.

Landscape and Visual Impacts

6.86 The NPS notes that landscape and visual impacts will vary on a site by site basis, but should be assessed within the EIA and described in the ES, including any effects at different phases of the development. Any proposals should aim to avoid or minimise the impact on the landscape and provide appropriate mitigation.

[39] Taken from Paragraph 5.85

6.87 The NPS further sets out that there is a strong presumption against road widening, new roads or SRFIs in National Parks, the Broads or AONBs unless any benefits significant outweigh the costs. Regard should also be given when a proposed scheme falls outside of these areas, but may affect them.

6.88 Local landscapes which are not nationally designated may also be highly valued or protected by local designations. The NPS notes that although such local designations should be considered and the siting and operation of any development should avoid adverse effects to the landscape and minimise harm, local designations should not be used as a reason for refusing consent. With regard to visual impacts, a judgement will be made by the SoS as to whether these outweigh the benefits of development.

Land Use – Open Space, Green Infrastructure and Green Belt

6.89 Re-using previously developed land is considered in the NPS to contribute to sustainable development, but identifies that for SRFIs, brownfield land may not be economically or commercially feasible. There is a presumption against inappropriate development within Green Belts and so where promoters of SRFIs find viable sites on Green Belt land, it should be clearly demonstrated to the SoS that very special circumstances[40] exist to justify planning consent for development in such an area.

6.90 The NPS further sets out that Applicants should identify existing and proposed land uses near the project and the effect on these, as well as having regard to the LA's assessment of the need for open space, sports and recreation facilities if these are proposed to be developed on. Consideration should also be given to the role of agricultural land, seeking to use poorer quality land over higher quality and identifying and minimising any impacts on soil quality.

Noise and Vibration

6.91 Noise can have a range of impacts on human health and quality of life, as well as wildlife and biodiversity, and vibration can damage buildings.

6.92 Assessment of significant noise impacts should form part of the ES, describing the following:

- Sources of noise, including the likely usage regarding the number of movements, fleet mix and diurnal pattern;
- Identification of noise sensitive premises or areas and an assessment of the effect of predicted changes in the noise environment on these;
- Characteristics of existing noise environment;
- A prediction of how noise will change as part of the proposed development across different time periods and times of day;
- Measures to be used to mitigate noise effects and the best available techniques; and

[40] Paragraph 5.172

- The nature and extent of the noise assessment should be proportionate to the likely noise impact.

6.93 Relevant British Standards and other guidance should be used when assessing noise. This includes using the Calculation of Road Traffic Noise to predict road traffic noise and Calculation of Railway Noise to predict the noise of new railways. When assessing noise on designated nature conservation sites, protected landscapes, protected species or other wildlife, the applicant should consult Natural England.

6.94 Development must be in accordance with statutory noise requirements and have regard to relevant sections of the Noise Policy Statement for England, NPPF and Governments associated planning guidance on noise. The project should demonstrate good design, minimising noise emissions and consider the need to mitigate impacts elsewhere on the road and rail networks which have been identified as arising from the development.

6.95 The SoS should consider whether requirements are needed which specify that the mitigation measures proposed by the applicant are put in place to prevent noise exceeding levels described. Development consent should not be granted unless the following aims are met by the proposal:

- The noise created by the new development avoids significant adverse impacts on health and quality of life and mitigate and minimise any other adverse impacts on health and quality of life; and

- Contribute to improvements to health and quality of life through management and control of noise.

6.96 The Examining Authority and SoS should consider whether mitigation measures for both operational and construction noise are needed beyond any forming part of the project application and whether requirements need to be imposed to ensure delivery of mitigation measures. Such mitigation measures should be proportionate and including one or more of:

- Engineering: containment of noise generated;

- Materials: use of materials that reduce noise;

- Layout: sufficient distance between source and noise-sensitive receptors; and

- Administration: specifying acceptable noise limits or times of use.

6.97 The relevant Noise Insulation Regulations will apply for most national network projects, placing a duty on the authority to offer noise mitigation and ventilation for both construction and operational noise. If it is considered appropriate to provide noise mitigation through compulsory acquisition in order to gain consent, such properties should be included within the development consent order land to which compulsory acquisition powers are being sought.

Impact on Transport Networks

6.98 The NPS sets out the impacts of schemes of the surrounding transport networks and infrastructure and consideration should be given by the Applicant to addressing severance issues and local policies regarding transport.

6.99 With regard to SRFI developments, the NPS notes that where significant transport impacts may occur, a Transport Assessment should be included and impacts should be described in the ES. It is recognised that SRFIs may impact on surrounding connecting transport networks and so steps to mitigate such impacts should be identified. If these are insufficient, then the SoS may impose obligations to fund infrastructure. Travel planning should be undertaken for such major development and where this may not be sufficient, further work with the LA and highway authorities may be required.

6.100 Where schemes impact on the on the Strategic Road Network, regard should be given to the DfT Circular 02/2013 *The Strategic Road Network and the delivery of sustainable development.*

6.101 In decision making relating to SRFIs, the Examining Authority and SoS will consider impacts on local transport networks and policies in the local plans. The SoS should ensure that reasonable steps have been taken to mitigate impacts of SRFIs on the connecting transport networks and if such mitigation measures are insufficient, requirements and/or obligations for funding infrastructure should be accepted. Providing this is accepted and attribution of costs is calculated in accordance with the Department's guidance, development consent should not be withheld.

6.102 Mitigation measures on strategic rail should be proportionate and reasonable and travel planning should be undertaken for all major developments generating significant transport movement. In circumstances where a travel plan alone is not sufficient to reduce traffic demand to acceptable levels, it should be considered whether implementing traffic management measures is appropriate and how such might be best delivered.

Water Quality and Resources

6.103 Infrastructure development can have adverse effects on the water environment and construction and operation can lead to increased demand for water, involve discharges to water and cause adverse ecological effects resulting from physical modifications to the water environment, as well as possible increased risk of spills and leaks of pollutants to the water environment. Such could adversely impact on health or protected species and result in surface or ground water failing to meet environment objectives of the Water Framework Directive.

6.104 The planning system should contribute to and enhance the natural and local environment by preventing unacceptable risk of water pollution on new development. Where applicable, an application for a development consent order has to contain a plan with accompanying information identifying water bodies in a River Basin Management Plan.

6.105 Applicants should make early contact with the relevant regulators, including the Environment Agency, for abstraction licensing and with water supply companies. Where development is subject to EIA the applicant should carry out an assessment of

the impacts of the proposed project on water quality, water resources and physical characteristics as part of the ES. Projects that are making improvements should take opportunities to improve upon the quality of existing discharges where these are identified and shown to contribute to Water Framework Directive commitments.

6.106 Activities that discharge to the water environment are subject to pollution control. The Secretary of State will generally need to give impacts on the water environment more weight where a project would have adverse effects on the achievement of the environmental objectives established under the Water Framework Directive.

6.107 The SoS should be satisfied that a proposal has regard to:

- The River Basin Management Plans – which sets out specific objectives for particular river basins; and

- The Water Framework Directive and daughter directives – projects should aim for no deterioration of ecological status in water courses so that Article 4.7 of the Directive does not need to be applied. The specific objections for particular river basins are set out in River Basin Management Plan.

6.108 The ExA and the SoS should consider proposals put forward by the applicant to mitigate adverse effects on the water environment and whether appropriate requirements should be attached to any development consent and/or planning obligations. The SoS can grant consent if the Environment Agency objects based on the impacts on water quality/resources if they are satisfied that all steps have been taken by the applicant and Environment Agency to resolve concerns.

6.109 The SoS should consider whether the applicant's proposed mitigation measures which are needed for operation and construction are acceptable and a construction management plan may help codify mitigation.

6.110 The project should adhere to any National Standards for sustainable drainage systems, which introduces a hierarchical approach to drainage design. The risk of impacts on the water environment can be reduced through careful design to facilitate adherence to good pollution control practice.

Summary of NPS

6.111 The Proposed Development is a NSIP and the NPS provides the primary basis for the consideration of a nationally significant SRFI and improvements on the National Road Network.

6.112 The NPS is a very specific policy regime designed to provide a bespoke policy framework for the infrastructure (concerning national networks) which is necessary to meet identified national needs. It contains detailed guidance, on a topic by topic basis, to guide both applicants and the decision maker in their approach, appraisal and assessment of the NSIP proposals for national networks in respect of design, assessment and mitigation.

6.113 Under Section 104 of the PA2008, an application for a SRFI must be determined in accordance with the NPS, except in limited specified circumstances. The NPS confirms that there is a presumption in favour of granting development consent for national networks NSIPs that fall within the need for infrastructure established in the NPS and in considering any development proposals there is a need to weigh adverse impacts against its benefits.

6.114 The NPS confirms that there is a compelling need to create a network of SRFI to facilitate economic growth. It is underpinned by Network Rail's long-range forecasts of passenger and freight demand out to 2043, which form the basis for a separate route studies being undertaken by Network Rail to consider options for further enhancement of network capacity, alongside the proposed HS2 development. The forecasting process undertaken by Network Rail has taken account of the Rail Central proposals as part of the quantum of additional SRFI capacity expected to be developed over the next 30 years.

6.115 The NPS sets the matters which the PINS and the SoS are required to consider under a series of matters and issues. The acceptability of the Proposed Development against these matters is considered in Sections 8 to 22 of the draft Planning Statement.

7. Other Relevant Policy

7.1 Section 104 of the PA 2008 identifies that the SoS must have regard to relevant NPS but also matters that are 'important and relevant' to the decision. Accordingly, other national policy, guidance, development plan policy, and topic-specific legislation, guidance and best-practice methods may be a material consideration in the decision making process for an application for a DCO.

7.2 In principle, the following planning policy context may have relevance for the Proposed Development, and has accordingly been considered in developing the proposals:

- National Planning Policy Framework (2012);
- Planning Practice Guidance (2014);
- Relevant Development Plan Documents:
  - West Northamptonshire Joint Core Strategy Local Plan (Part 1) (adopted December 2014);
  - South Northamptonshire Local Plan (adopted 1997) (Saved Policies);
  - Northamptonshire Minerals and Waste Local Plan (adopted July 2017);
  - Northampton Local Plan Saved Policies (adopted 1997);
- Northampton Central Area Action Plan (adopted April 2013). Relevant emerging Local Plan documents;
- Relevant Supplementary Planning Guidance;
- Relevant Supplementary Planning Documents;
- Transport Plans; and
- Strategies and other guidance.

7.3 The Order Limits fall entirely within the administrative areas of SNC and NBC, however it should be recognised that the influence of the Rail Central Project will extend beyond the Order Limits into other administrative areas.

National Planning Policy Framework

7.4 The NPPF was adopted on 27 March 2012. The NPPF is a key part of the government's reforms to make the planning system less complex and more accessible. It acts as guidance for local planning authorities and decision-makers, both in drawing up plans and making decisions about planning applications.

7.5 Paragraph 3 of the NPPF is explicit that the Framework does not contain specific policies for NSIP, which are determined 'in accordance with the decision-making

framework set out in the PA2008 and relevant national policy statements for major infrastructure'. However, matters that the decision-maker considers important and relevant when making decisions on applications for development consent are also applicable and may include the NPPF (as confirmed by Paragraph 3 of the Framework).

7.6 With specific regard to transport infrastructure, Paragraph 31 of the NPPF advises that:

> *"Local authorities should work with neighbouring authorities and transport providers to develop strategies for the provision of viable infrastructure necessary to support sustainable development, including large scale facilities such as rail freight interchanges, roadside facilities for motorists or transport investment necessary to support strategies for the growth of ports, airports or other major generators of travel demand in their areas…"*

Planning Practice Guidance

7.7 On 6 March 2014 the Department for Communities and Local Government (DCLG) launched the online national Planning Practice Guidance (the PPG). This was accompanied by a Written Ministerial Statement setting out a list of the previous planning practice guidance documents cancelled when the site was launched.

7.8 The PPG consolidates (and revokes) guidance on the EIA process that was formally found in the following documents:

- Circular 02/99 Environmental Impact Assessment (1999);
- Environmental Impact Assessment: a Guide to Procedures (DETR, 2000);
- Note on Environmental Impact Assessment Directive for Local Planning Authorities (Office of the Deputy Prime Minister (ODPM), 2004); and
- Preparation of Environmental Statements for Planning Projects that Require Environmental Assessment – A Good Practice Guide (Department of Environment (DoE), 1995).

7.9 The NPS makes specific reference to the PPG in respect of imposing requirements in relation to a development consent. Paragraph 4.9 of the NPS confirms that in accordance with the use of planning conditions guidance within the PPG, any requirements sought in relation to the development consent should be necessary, relevant to planning, relevant to the development to be consented, enforceable, precise and reasonable in all other respects.

Other Guidance

7.10 The EIA process undertaken for the Proposed Development, has taken into account other relevant guidance, including but not limited to:

- Guidelines for Environmental Impact Assessment, Institute of Environmental Management and Assessment (IEMA), 2006;

- Environmental Impact Assessment Guide to Climate Change Resilience and Adaptation, Institute of Environmental Management and Assessment (IEMA), November 2015;

- The Design Manual for Roads and Bridges (DMRB) Volume 11: Environmental Assessment (and updates) (Highways Agency et al.);

- Guidelines for Ecological Impact Assessment in the United Kingdom (IEEM, 2006); and

- Guidelines for Landscape and Visual Impact Assessment 3 (Landscape Institute and IEMA, 2013).

Regional and Local Planning Policy

Adopted West Northamptonshire Joint Core Strategy Local Plan (Part 1)

7.11 The West Northamptonshire Joint Strategic Planning Committee adopted the West Northamptonshire Joint Core Strategy Local Plan (Part 1) on 15 December 2014. The adopted Joint Core Strategy covers the administrative areas of Daventry District, Northampton Borough and South Northamptonshire District. The following policies may be of relevance to the Proposed Development.

7.12 Policy SA states that the Council will take a positive approach that reflects the presumption in favour of sustainable development in the NPPF when considering development proposals. Where proposals accord with the local plan they will be approved without delay, and where the plan is absent, silent or out of date proposals will be approved unless adverse impacts would significantly and demonstrably outweigh the benefits or specific policies in the NPPF indicate the development should be restricted.

7.13 Policy S1 sets out the Distribution of Development and states that development will be concentrated primarily in and adjoining the principal urban area of Northampton. Development of a lesser scale will be located adjoining Daventry, the development needs of the rural service centres will be provided for and development in rural areas will be limited. In assessing the suitability of sites for development, priority will be given to making best use of previously developed land.

7.14 Policy S7 states that provision will be made for a minimum net increase of 28,500 new jobs in the period 2008-2029.

7.15 Policy S8 states that the majority of new job growth will be within the urban area of Northampton. The policy sets out how jobs growth will be accommodated at both Northampton and Daventry and also lists four sites for employment provision within the South Northamptonshire District.

7.16 Policy S10 Sets out the following Sustainable Development Principles;

(a) Achieve the highest standards of sustainable design incorporating safety and security considerations and a strong sense of place;

(b) Improve environmental performance, energy efficiency and adapt to climate change;

(c) Make use of sustainably sourced materials;

(d) Minimise resource demand and the generation of waste;

(e) Be located for easy access by walking, cycling and public transport;

(f) Maximise use of solar gain, passive heating and cooling, natural light and ventilation using site layout and buildings design;

(g) Maximise the generation of energy needs from decentralised and renewable or low carbon sources;

(h) Maximise water efficiency and promote sustainable drainage;

(i) Protect, conserve and enhance the natural and built environment and heritage assets and their surroundings;

(j) Promote the creation of green infrastructure networks, enhance biodiversity and reduce the fragmentation of habitats; and

(k) Minimise pollution from noise, air and runoff.

7.17 Policy S11 states that major development should use the sustainable development principles set out in Policy S10 to contribute to reductions in carbon emissions and adapt to climate change. Proposals should be sensitively located and have no significant adverse impact on amenity, landscape character and access and new non-residential floorspace should achieve a minimum of BREEAM very good.

7.18 Policy C1 seeks to change behaviour and achieve modal shift away from private car use, priority will be given to proposed transport schemes that promote sustainable transport.

7.19 Policy C2 states that new development should maximise travel choice from non-car modes, mitigate its effects on the highway network and be accompanies by a transport assessment and travel plan prepared in accordance with current best practice guidelines.

7.20 Policy C3 sets out the Council's policy aspirations in terms of strategic connections and prioritises retaining and enhancing West Northamptonshire's strategic connections for economic advantage. For rail, the policy sets out various initiatives including; enhancing journey time and frequency between London and Birmingham, introduce additional services to the wider north west for passenger and freight movements along the M6 corridor to relieve congestion on the road network, and enhancing rail connections to the Daventry International Rail Freight Terminal.

7.21 Policy C4 seeks to improve connections between urban areas, including ensuring an effective, reliable, inter-urban public transport network along key journey to work corridors. These corridors include A43 Brackley to Northampton.

7.22 Policy E4 states that further rail connected storage and distribution uses and associated rail and road infrastructure is supported in principle at Daventry International Rail Freight Terminal (DIRFT). A high standard of layout, landscaping, building design and materials will be required.

7.23 Policy E5 seeks to support Silverstone Circuit as an international venue for motorsport, employment, tourism, education and leisure development. Provision will be made for new development here including a 40ha advanced technology park, 15ha of additional B1-B8 employment, and a 600 place university technical college.

7.24 Policy E8 stated that development at the Northampton Junction 16 Strategic Employment Site must comply with the principles set out in policies S10 and S11. The site is allocated for B1, B2 and B8 uses and necessary infrastructure must be phased alongside the delivery of the development.

7.25 Policy BN1 states that Green Infrastructure Connections will be recognised for their important contribution to sense of place. Measures to enhance existing and provide new green infrastructure will be designed and delivered sustainably and to a high quality, mitigate and adapt to climate change, reflect local characters and be supported by a long term management strategy.

7.26 Policy BN2 states that development that will maintain and enhance existing designations and assets or deliver a net gain in biodiversity will be supported. In cases where there is no reasonable alternative to development that is likely to prejudice the integrity of an existing wildlife site or protected habitat, appropriate mitigation, including compensation, will be expected.

7.27 Policy BN5 seeks to ensure that designated and non-designated heritage assets, and their settings, will be conserved and enhanced. Development in areas of landscape sensitive or heritage significance should sustain and enhance the heritage and landscape features, demonstrate an appreciation and understanding of the impact of the development on the assets, and be sympathetic to locally distinctive landscape features, design styles and materials.

7.28 Policy BN6 states that the re-use of the former Weedon Depot will be supported, a mix of uses will be appropriate for the site. Development proposed on this site should address the need to preserve the heritage value of the site, the impact on the viability of the town centre of leisure/retail/employment use in this area and a transport assessment.

7.29 Policy BN7A states that new development must ensure adequate and appropriate water supply and waste water infrastructure. Proposals will ensure that adequate waste water treatment capacity is available and sustainable drainage systems are used where practicable.

7.30 Policy BN7 states that development proposals will comply with flood risk assessment and management requirements set out in the NPPF. A sequential approach will be applied to all proposals and new development will need to demonstrate that there is no increased risk of flooding. Proposals for development of 1ha or above, or within

Flood Zones 2 and 3, must be accompanied by a flood risk assessment that sets out the mitigation measures.

7.31 Policy BN9 states that proposals for development likely to cause pollution or risks to safety will need to demonstrate that they provide opportunities to minimise and reduce pollution issues. Development should seek to maintain and improve air quality, protect and improve surface water and groundwater quality, minimise light pollution and reduce the adverse impacts of noise. Development that will cause pollution individually or cumulatively will only be permitted if measures can be implemented to minimise pollution to provide a high standard of protection or health and environmental quality.

7.32 Policy N4 sets out details relating to the Northamptonshire West SUE including that 2,550 dwellings will be provided and that the proposals will include a local centre.

7.33 Policy N5 sets out the details relating to the Northampton South SUE stating that it will comprise 1,000 dwellings and a local centre with retail facilities of an appropriate scale.

7.34 Policy N6 states that the Northampton South of Brackmills SUE will comprise 1,300 dwellings a local centre with retail facilities of an appropriate scale and various other features.

7.35 Policy N9, Northampton Upton Park SUE, states that this allocation will include 1,000 dwellings and that the proposals will include a local centre.

7.36 Policy N9A relates to Northampton Norwood Fran/Upton Lodge SUE which will deliver 3,500 dwellings two primary schools and a local centre.

7.37 Policy N12 relates to Northampton's Transport Network Improvements and sets out the following projects;

(a) Improved connectivity through sustainable transport to link essential services;

(b) Improved connectivity throughout the town centre from all parts of the town by public transport, waking and cycling;

(c) Improved priority interchanges of central Northampton bus station;

(d) Enhanced public transport services to and from priority interchanges;

(e) Identify demand management measures on public transport routes to improve public transport reliability;

(f) Revised parking standards;

(g) Strategic highway measures as identified in the M1/A45 growth management scheme;

(h) Sandy Lane relief road; and

(i) Northampton North West bypass.

7.38 Policy T3 sets out the details of the Towcester South Sustainable Urban Extension, including that it will make provision for 3,000 dwellings and at least 15.5ha of employment land.

South Northamptonshire: Local Plan 1997

7.39 The Local Plan, which covered the period 1998-2006, was adopted in 1997 and is now considered to be largely out of date in the context of Paragraph 14 of the NPPF.

7.40 Notwithstanding the above, a number of the policies and proposals contained in the Local Plan were 'saved' by the Government Office in September 2007. Following the adoption of the JCS, several of the 'saved' policies were replaced. Some policies, however, remain saved and those relevant to the Proposed Development are set out below.

7.41 Within the South Northamptonshire Local Plan 1997 proposals maps, the Order Limits for the Main SRFI Site are predominantly designated as being located within an area of Open Countryside. Notwithstanding this, land within to the west of the A43, which is within the order limits for the main site is designated as being within Retail and Recreational Use.

7.42 Policy E7 sets out in what circumstances industrial and commercial development will be permitted in villages and the open countryside.

7.43 Policy EV1 sets out the design elements new development will be expected to pay attention to.

7.44 Policy EV2 protects the open countryside from development.

7.45 Policy EV11 seeks to protect conservation areas from development that may impact the setting or views of the conservation area.

7.46 Policy EV21 seeks to retain and protect landscape features, including trees and hedgerows, where they make an important contribution to the character of the area.

7.47 Policy EV29 sets out the requirements for proposals which include an element of landscaping.

7.48 Policy IMP1 seeks contributions from major development for infrastructure and community facilities where the need for these arises from the development.

Northampton Local Plan 1997

7.49 The Local Plan, which covered the period 1988-2006, was adopted in 1997 and, given the time period the plan covered has now passed, many of the policies are now considered to be out of date.

7.50 A number of policies were saved in 2007 to ensure that they remained part of the development plan prior to the adoption of a new plan. Some of these saved policies have now been replaced by the West Northamptonshire Joint Core Strategy, those which remain saved, and therefore remain part of the development plan, are set out

below. Please note, only those policies relevant to the Proposed Development have been summarised below.

7.51 Policy E7 seeks to protect the skyline in certain areas from development that may have an adverse impact.

7.52 Policy E9 sets out areas where special importance will be attached to the impact of development on the character of locally important landscapes.

7.53 Policy E20 sets out the requirements new development should adhere to in terms of being designed to reflect the character of its surroundings and being located to ensure adequate standards of privacy and daylight.

7.54 Policy E26 sets requirements for development within conservation areas.

7.55 Policy B14 seeks to ensure that business uses are retained in existing and proposed business areas unless other development would be of benefit to the community or lead to substantial employment opportunities.

7.56 Policy B22 sets out the requirements proposals for small business units of up to 200 square metres should adhere to.

7.57 Policy B33 requires development proposals to have regard to existing hazardous installations.

7.58 Policy T12 requires adequate parking provision and areas for manoeuvring for development requiring servicing by commercial vehicles.

7.59 Policy T14 seeks to protect existing rail corridors from development that would adversely affect them.

7.60 Policy L26 seeks to protect sites in existing recreational or leisure use from development for an alternative use.

7.61 Policy D9 sets out the requirements for development that would be permitted adjoining J15A of the M1.

Northamptonshire County Council Minerals and Waste Local Plan

7.62 The Minerals and Waste Local Plan was adopted on 1 July 2017 and comprises the land use planning strategy for minerals and waste related development, and all other forms of development, made in Northamptonshire.

7.63 The northern half of the Order Limits for the Main SRFI Site is within a minerals safeguarding area. Policy 28 sets out requirements for development in Minerals Safeguarding Areas. It states that development of a significant nature in Minerals Safeguarding Areas will have to demonstrate that the sterilisation of mineral resources of economic significance will not occur as a result of the development and that the development would not pose a serious hindrance to future extraction in the vicinity.

7.64 A small area at the north east of the Main SRFI Site is within the buffer zone associated with a nearby allocated site for the Provision of Sand and Gravel. The allocation site,

M1: Milton Malsor is identified for the provision of sand and gravel and the associated buffer zone (Policy 30) seeks to prevent land use conflict in close proximity to such allocated sites.

South Northamptonshire: Local Plan (Part 2A)

7.65 Consultation on the Pre-Submission Draft of the South Northamptonshire: Local Plan Part 2 was held until 10th November 2017.

7.66 Policy Site Development Principles 1 sets out general development principles in respect of sustainable urban design and the quality of the environment.

7.67 Policy Site Development Principles 2 sets a series of criteria for design principles, including additional criteria for major development proposals. Developments are required to make a positive contribution to the built and natural environment, recognise and complement the local character of the area and result in a high quality design.

7.68 Policy Site Development Principles 3 requires new development to provide for the necessary onsite and, where appropriate, off-site infrastructure requirements arising from the proposal.

7.69 Policy Employment 2 New Employment Development requires proposals that would involve the construction of a new building in the open countryside to be supported by a robust business plan. The proposal will need to demonstrate why the location is required and that the scale of development is appropriate.

7.70 Policy Connections 1 Electric Charging Points requires one parking bay per 10 parking bays.

7.71 Policy Natural Environment 1 Rural Character states that development proposals on sites outside defined settlement confines will only be permitted where they do not cause significant harm to the landscape. Developments should not have an unacceptable effect on the rural tranquillity of the area and should be informed by, and be sympathetic to, the landscape areas identified in the Northamptonshire Landscape Character Assessment.

7.72 Policy Natural Environment 3 Trees, Woodland and Hedgerows requires proposals for development to provide for the protection and integration of existing trees, woodland and hedgerows for their wildlife, landscape, and/or amenity value.

7.73 Policy Natural Environment 5 Biodiversity and Geodiversity requires proposals to seek to conserve biodiversity and geodiversity, and actively enhance biodiversity in order to provide net gains wherever possible.

7.74 Policy Natural Environment 10 HS2, Major Developments and National Significant Infrastructure Projects states:

7.75 “The design and construction of the HS2 and other major developments and nationally significant infrastructure projects must minimise adverse impacts on the environment.

- *Any environmental harm that would occur as a result of such developments should be fully mitigated and compensated with opportunities taken to address any shortfalls identified in the Northamptonshire Biodiversity Action Plan and to bring about wider landscape enhancements. The use of native species is encouraged as will the enhancement of existing and creation of new biodiversity and green infrastructure corridors and habitats."*

7.76 Consultation on the Proposed Submission Draft Local Plan Part 2 is anticipated to take place in Spring 2018.

Northampton Local Plan (Part 2)

7.77 The next stage of the progress will be the draft Plan which was due to be consulted on in Spring 2018 but, at the time of writing, still has not been made available. The Council have verbally advised that they anticipate the draft Plan consultation taking place in late 2018. There are no draft policies within this document.

Northampton Central Area Action Plan (CAAP) 2013

7.78 The CAAP was formally adopted by NBC in January 2013. It forms part of the Development Plan for Northampton Borough. The overall aim of the Action Plan is to provide a consistent strategic framework for the improvement and extension of the town centre whilst seeking to protect and enhance its intrinsic historic built character and green spaces.

7.79 Policies relevant to the Proposed Development are summarised below.

7.80 Policy 1 sets out the requirements to ensure all development adheres to a high design standard and meets the stated design objectives.

7.81 Policy 3 states that changes to the public realm should be consistent with the Public Realm Implementation Framework.

7.82 Policy 4 required development in the Central Area to deliver or contribute towards green infrastructure.

7.83 Policy 5 sets out the requirements for developments within areas at risk of flooding and the measures required to address surface water drainage and foul sewerage.

7.84 Policy 6 details the need for improvements to identified sections of the inner ring road.

7.85 Policy 7 sets out the development principles for the replacement of Greyfriars Bus Station.

7.86 Policy 9 concerns the pedestrian and cycling movement framework and sets out requirements for new development to consider this.

7.87 Policies 11 – 14 define the town centre, set out aspirations for its growth and detail how the retail offer will be improved to meet capacity.

7.88 Policy 15 seeks to ensure a range of high quality office and business uses are retained and provided.

7.89 Policy 16 allocates development sites within the Central Area for up to 3,400 new homes over the period to 2026.

7.90 Policies 17 – 35 set out details for various development sites within the Central Area.

7.91 Policy 36 requires all development to provide the appropriate on and off site infrastructure to mitigate the impact of development.

South Northamptonshire: Supplementary Planning Documents (SPDs)

7.92 The following SPDs may be of relevance to the Proposed Development:

- Energy Efficiency (July 2013);
- Renewable Energy (July 2013);
- Energy Efficiency and Renewable Energy (Appendices) (not dated); and
- Energy and Development (March 2007).

South Northamptonshire: Supplementary Planning Guidance (SPG)

7.93 SNC has a range of SPG on various topics, however, many are out of date. The following documents may be of relevance to the Proposed Development:

- Conservation Areas (not dated);
- Light Pollution (not dated);
- Listed Buildings (not dated);
- Nature Conservation (not dated); and
- Trees and Development Parts 1 and 2 (not dated).

Northamptonshire Supplementary Planning Documents

7.94 NBC has produced several SPDs to expand on polices included within the Development Plan Documents. The following SPDs may be of relevance to the Proposed Development:

- Biodiversity Supplementary Planning Document (September 2017);
- Nene Meadows Supplementary Planning Document (February 2014); and
- Planning Obligations SPD (2013).

Northamptonshire County Council Transportation Plan

7.95 The Transportation Plan (March 2012) comprises a suite of documents, which set out 'Thematic Transport Strategies' relating to various transportation modes. The Transportation Plan covers Northamptonshire as a whole and is a statutory requirement of the Transport Act 2000 and the Local Transport Act 2008, which requires Council's to set out plans and policies for transport and how they intend to implement them.

7.96 Strategic Policy 19 and 20 are set out under the heading 'Improving the Efficiency of Freight Movements'. Policy 19 states that the Council will work to improve journey times and reliability on the highway and freight networks in order to increase efficiency and facilitate economic growth. Policy 20 states the Council will work closely with the Highways Agency to ensure energy between policies concerning the strategic network and the local network.

7.97 Alongside the County Council Transportation Plan are several thematic transport strategies. The Northamptonshire Rail Strategy was published in January 2013 following adoption by Northamptonshire County Council's Cabinet in December 2012. The Rail Strategy sets out the overarching vision for rail within Northamptonshire and the following policies may be relevant to the Proposed Development.

7.98 Policy RAIL 22 supports an increase in the use of the rail network for freight including the provision of additional track capacity and clearance to accommodate large containers.

7.99 Policy RAIL 23 supports further developments of rail freight terminals subject to appropriate planning considerations and the provision of appropriate highway access.

7.100 The Northamptonshire Road Freight Strategy, another thematic transport strategy, which sits alongside the Transportation Plan, includes the following policies relevant to the Proposed Development:

7.101 One of the Overarching Objectives states:

"We will aim to increase the options available to freight companies when moving goods and encourage a shift to rail and water."

South Northamptonshire: Transport Strategy

7.102 The latest South Northamptonshire Transport Strategy is dated 2010 and makes the following reference to the benefits of rail freight:

"The provision and ability to move goods by rail (and waterways where appropriate) is vital, not just for the economy but also to meet other objectives such as climate change."

7.103 The Strategy also confirms that SNC feel that one of the key challenges to secure sustainable economic growth is:

> *"The balance between road and rail freight and logistics for the area – a major concern given the development pressure for B8 distribution in the District given its location, with which the Council has major concerns in terms of impact, increasing heavy goods traffic and the current over provision in the County as a whole (NEL: SELA 2009)"*

South Northamptonshire: Economic Growth Strategy

7.104 This document sets out the economic development priorities for the District over a 3 year period. The latest document is the Economic Development Strategy for 2016-2019 which was adopted as a policy document by the Council in July 2016. The Economic

Development Strategy identifies logistics as a key local economic sector and sets out a number of actions across a range of economic and skills agendas to support the continued growth of the sector. These agendas include issues relating to skills and training, working with providers of training and education and matching local job-seekers with employers.

South Northamptonshire Logistics Study (May 2017)

7.105 The Logistics Study for South Northamptonshire was prepared by GVA and published by the Council in May 2017. The aims of the report are twofold - firstly to provide a detailed evidence base of the logistics sector, and secondly identify suitable and appropriate opportunities to grow the sector within the District.

7.106 Section 2 of the Study provides an overview of the sector and confirms that logistics employment is expected to see significant growth in the next 20 years. It also highlights the strong supply chain linkages with a wide variety of sectors and that logistics businesses are a fundamental enabler of growth within the national economy. The Study also identifies that the District is a critical strategic location, at the 'crossroads' of national road (M1/M40/A14) and rail networks and with strong international links via airports and ports (within 2-3 hour drive times) and 90% of the UK population of England and Wales accessible within a drive time of 4 hours.

7.107 This position is further lamented in Section 4 of the Study, which confirms that the Districts position has a close geographical relationship with the Midlands Engine, The Golden Triangle and SEMLEP[41]. Within this context South Northamptonshire is again identified as forming part of a key logistics hub formed by the M1 as well as a number of key A-roads offering strategic freight routes and key transportation links. The promotion of a number of new strategic distribution schemes that take advantage of these connections is acknowledged as indicating "significant levels of occupier demand".

7.108 The Study also confirms that there are relatively few locations across the UK, which offer the nature of connections and scale of development provided by South Northants. Furthermore, the ability to locate close to Northampton is identified as an associated driver given the potential to relocate existing business from older and obsolete premises and for distribution operators to service key manufacturing activity in the town.

7.109 Paragraph 5.8 of the Study recognises that access to rail facilities play a further driver in demand, with the M1 and wider road infrastructure providing efficient access to rail-road intermodal freight terminals. Further consideration is given to rail based logistics demand within Paragraph's 5.33 to 5.39 and points to robust growth with 1.69 billion net tonne kilometres of domestic intermodal freight moved in the first quarter of 2016-17. The report acknowledges the Rail Central proposals and indicates that it would have the potential to dramatically change the role of District within the logistics sector, potentially providing a new market differentiator that would set the borough apart from other competing locations in the M1 market (paragraph 9.24).

[41] P13 highlights a number of developments that combined constitute over 12 million sq ft of additional provision in the SEMLEP by late 2018. All of the schemes referenced have been delivered / promoted by Prologis.

Other Relevant Studies

SEMLEP Economic Plan and Logistics Report

7.110 The SEP sets out a vision and aspirations for growth across the area covered by the South East Midlands Local Enterprise Partnership (LEP), which comprises 14 local authorities including South Northamptonshire. Substantive growth is expected to be led by the private sector, with major inward investment which will take advantage of the excellent road and rail links to the north and south and its central location between Oxford, Cambridge, London and Birmingham.

7.111 The SEP aims for the delivery of new homes and infrastructure to grow the labour force and support the creation of new jobs and growth in productivity, and such investment is an element considered to be central to achieving growth across the LEP area.

7.112 Logistics is identified as a '*Showcase Sector*' and a major strength of the South East Midlands economy, which has the potential to rapidly grow. The SEP notes that this growth must, however, be supported through the increased provision of suitable employment land.

7.113 In December 2013, SEMLEP produced a report on logistics confirming that logistics is a critical enabler in improving the competitiveness of a nation and local areas and the scale of employment which exists within the sector which is stated at 2.2 million – one in twelve workers. However the report notes that the sector's performance lags behind many of our European competitors and performs poorly in respect of training.

7.114 Across the SEMLEP area, the report confirms that logistics employs as many people as the health sector with high concentrations existing in Milton Keynes, Northampton and Bedford – locations which are key logistics locations and it is crucial that the supply of personnel is available to meet today's and future requirements. In this context, the report notes that (at the time), the SEMLEP area had the highest employment rate (6.9%) with nearly 31,000 individuals claiming JSA of which 24% are young people (under 25) and that 46% of those claiming JSA has done so for more than six months.

7.115 The report therefore identifies a range of potential measures to secure new job opportunities in the sector.

Rail Freight Strategy (September 2016)

7.116 The Government's Rail Freight Strategy, which was developed in collaboration with Network Rail, was published by the Department for Transport on 13 September 2016. This strategy sets out the vision for how rail freight can continue to grow and how the logistics sector and rail industry can collaborate to relieve pressure on the road network.

7.117 The Report notes that a modal shift from road to rail is important as the rail freight industry has significantly benefitted the UK economy and each tonne of freight transported by rail reduced carbon emissions by 76% compared to road. The full economic and carbon benefits of rail freight will only be realised when this industry grows and achieves its potential.

7.118 With regards to network capacity, the Strategy states that it is more important than ever that sufficient capacity is available on the rail network to accommodate growth. To deliver the services that customers need and expect, both new infrastructure and making the most of the capacity on the existing network are required.

7.119 The Strategy notes at Paragraph 52 that Midlands Connect are considering freight as part of a Transport Strategy for the Midlands, which will be important for setting out a vision for economic growth across regions of the UK.

7.120 The Strategy refers to the Report by Arup which identified priority issues to support rail freight and a modal shift from road. This included supporting the development of high capacity rail freight interchanges and the availability of efficient freight paths to improve journey times.

Summary of Policy Position

7.121 The above section has outlined the planning policy context which may have relevance for the Proposed Development and which in accordance with Section 104 of the PA 2008 the SoS must have regard to as matters that are 'important and relevant' to the decision.

7.122 In summary, this review of the other policy context has identified that the Order Limits for the Main SRFI Site fall entirely within the administrative areas of SNC and NBC.

7.123 In the context of the relevant local planning policy position, the relevant Development Plan confirms that for the most part, the Order Limits for the Main SRFI Site are principally designated as being within Open Countryside. Notwithstanding this, land to the west of the A43, which is within the Order Limits for the Main SRFI Site is designated as being within Retail and Recreational Use. With the emergence of the South Northamptonshire Local Plan Part 2, the Proposals Maps for the authority are in the process of being updated, however drafts have not yet been prepared for consultation. Conversations with Planning Policy officers indicate that these existing designations are unlikely to change.

7.124 In accordance with the NPPF, the Core Strategy Local Plan reflects the presumption in favour of sustainable development. This further confirms that where proposals accord with the Core Strategy Local Plan they will be approved without delay. In respect of the distribution of development, it is confirmed that this will principally located within the urban area of Northampton.

7.125 In respect of the scale of future employment, the Core Strategy Local Plan confirms that a minimum net increase of 28,500 new jobs will be created in the period 2008-2029. Thus, indicating the deemed high performing economic market, which Rail Central is located within. In achieving this job growth and future employment development, the Core Strategy Local Plan sets out a series of sustainable development principles to be complied with. As identified through this document and the PEIR, these sustainability principles have been considered in bringing forward the Rail Central proposals.

7.126 Although the South Northamptonshire Local Plan and Northampton Local Plans were adopted a considerable time ago and the majority of the policies are considered to be out of date, they have been reviewed for overall due diligence purposes. For the most part these documents do not denote anything further than the information detailed within the Local Plan Core Strategy.

7.127 With regards to the emerging planning policy position, the pre-submission draft of the Local Plan Part 2 was consulted upon at the end of 2017. Additional consultation on the Proposed Submission Draft of the Local Plan is anticipated to take place in Spring 2018.

7.128 Additional to this, numerous studies and assessments have been reviewed, which are specific to South Northamptonshire, some of which has been used to inform the emerging planning policy for the authority. These have generally confirmed that logistics is a key local economic sector within the geographical location of South Northamptonshire.

7.129 Taking this a step further, the SEMLEP Economic Plan and Logistics Report refers to logistics as a 'Showcase Sector'. Furthermore, the studies recognise that access to rail facilities play a further driver in demand, with the M1 and wider road infrastructure providing efficient access to rail-road intermodal freight terminals. This clarifies the major strength of the South East Midlands economy, which has the potential to rapidly grow. However, it is confirmed that in order for this to happen, growth must be supported through the increased provision of suitable employment land.

7.130 This potential for growth is largely a result of its strategic location, positioned with good relationships between Midlands Engine, The Golden Triangle and SEMLEP. South Northamptonshire is recognised as being well positioned to take full advantage of forecast logistics growth and evidence cites the potential for Rail Central to dramatically change the role of District within the logistics sector, potentially providing a new market differentiator that would set the borough apart from other competing locations in the M1 market.

7.131 On the whole, the local policy and supporting document position is largely supportive of the continued growth of the logistics sector and in particular the delivery of SRFIs.

8. National Policy Statement for National Networks Compliance

8.1 The preceding sections of this Planning Statement have identified the legislative and policy framework for which this NSIP will be determined. The remainder of this draft Planning Statement is structured in the following manner:

- Section 9. Policy Need, Demand and Alternatives
- Section 10. Functional and Locational Criteria
- Section 11. Land Use
- Section 12. Impact on Transport Networks
- Section 13. Landscape and Visual Impacts
- Section 14. Historic Environment
- Section 15. Noise and Vibration
- Section 16. Biodiversity, Ecology and Nature Conservation
- Section 17. Flood Risk, Hydrology & Water Quality
- Section 18. Air Quality
- Section 19. Ground Conditions and Land Instability
- Section 20. Climate change adaptation
- Section 21. Socio-Economic Impacts
- Section 22. Health and Wellbeing
- Section 23. Waste Management
- Section 24. Civil and Military Aviation and Defence Interests
- Section 25. Overall Conclusions

8.2 In a situation where there is a relevant NPS[42], under s104 of the PA2008, the SoS must decide the application in accordance with the NPS, and in doing so he must have regard to:

- any local impact report (LIR);
- any prescribed matters; and

[42] As defined by s5 of the PA 2008 and referred to in s104 of the Act

- any other matter the SoS thinks important and relevant to his decision.

8.3 Subsequently, the designated NPS has effect under s104 of the PA2008 and the SoS must decide an application for a national networks NSIP in accordance with the NPS. This is the SoS is satisfied that to do so would be considered to apply with circumstances confirmed in Section 104(4) to Section 104(8) of the PA 2008.

8.4 Subject to the detailed policies and protections in the NPS, and the legal constraints as set out in Section 104 of the PA2008, there is a presumption in favour of granting development consent for national networks NSIPs that fall within the need for infrastructure established in the NPS. In considering any Proposed Development and in particular, when weighing its adverse impacts against its benefits, the ExA and the SoS need to take into account the SRFIs

- potential benefits, including the facilitation of economic development, including job creation, housing and environmental improvement, and any long term or wider benefits; and

- potential adverse impact, including any long term and cumulative adverse impacts, as well as any measures to avoid, reduce or compensate for any adverse impacts.

8.5 In this context, the NPS confirms that environmental, safety and economic benefits and adverse impacts, should be considered at national, regional and local levels.

8.6 It is this policy framework that the decision maker needs to have regard to in assessing SRFI NSIPs and is the starting point for appraisal of this application. Our appraisal is set out below in the following sections, having regard to this established framework and taking into account any of the mitigation measures and any relevant local planning policies.

8.7 The remainder of this Draft Planning Statement, as structured above considers the Rail Central SRFI proposals and assesses the scheme in compliance with the NPS.

9. Policy Need, Demand & Alternatives

9.1 The NPS clearly recognises the importance of rail freight and the increasing significant role it plays in logistics. It also recognises that rail freight is an important driver of economic growth. These conclusions are endorsed but the underpinning of these conclusions lie in the ability of rail freight to help drive economic growth is directly related to the provision of national networks (particularly in the form of SRFI) to facilitate an increase in rail freight share of container traffic.

9.2 The Government accepts and recognises (NPS paragraph 2.56) that given the specific locational requirements, the number of locations suitable for SRFI will be limited, which will restrict the scope of developers to identify viable alternative sites. Indeed, the NPS accepts (at paragraph 2.47) the siting of many existing rail freight interchanges in traditional urban locations inhibits expansion, as such sites are not conveniently located for the modern logistics and supply chain industry. Moreover, paragraph 4.84 of the NPS accepts that given locational requirements, countryside locations may be required for SRFI.

9.3 In this regard, the NPS strongly supports applications such as Rail Central SRFI in terms of the strategic need for well-located SRFI. The NPS support a "network" of SRFI and even accepts that even where potential alternatives might exist, the NPS does not limit the number of SRFI nor the need for them.

9.4 This and the following sections of the Planning Statement cover NPS compliance in matters such as need, demand and alternatives; all which heavily weigh in favour of the Proposed Development.

National Need

9.5 The NPS sets the context for consideration of need in this case. The need for SRFI is driven by a combination of:[43]

- *The changing needs of the logistics industry*

  The NPS confirms that a network of SRFI is a key element in aiding the transfer of freight from road to rail, supporting sustainable distribution and rail freight growth and meeting the changing needs of the logistics industry, especially the ports and retail sector. This need is emerging and in flux with the NPS noting that rail freight interchanges are not only locations for freight access to the railway but also locations for businesses, capable now or in the future, of supporting their commercial activities by rail. Therefore, from the outset, a rail freight interchange (RFI) should be developed in a form than can accommodate both rail and non-rail activities.

- *Rail Freight Growth*

[43] Paragraph 2.47 to 2.52 of the NPS

Rail freight has become an important driver of economic growth[44]. The NPS, underpinned by Network Rail long-range forecasts to 2043 demonstrate the scale of the pressure and urgency in delivering new SRFI facilities to accommodate and foster the long term growth in rail freight. These forecasts relate to a quantum of existing and proposed SRFI being brought forward to 2043/4, increasing rail served warehousing floorspace from 1.6 million sqm at present to more than 13 million sqm by 2043, such that by this time around 35-40% of new large warehousing would be rail connected[1].

Network Rail forecasts reflect the assumed delivery of new SRFI between Northampton and Milton Keynes equitable to some 2.5 million sq m of rail-served floorspace by 2043. Rail Central is included in the quantum of floorspace and sites on which the aggregate forecast is based.[2] It is these forecasts which underpin the NPS which states that these forecasts should be accepted for planning purposes (paragraph 2.49). As the NPS explains at paragraph 2.58, SRFI capacity is needed at a wide range of locations to match the changing demands of business. If this is not achieved, the NPS forecasts will not be met and wider government policy objectives on the economy, mobility and sustainability will be hindered.

- *Environmental Factors, primarily reducing carbon emissions and removing freight from the UK's roads*

  The NPS reaffirms that the Government's vision is to achieve a low carbon sustainable transport system that is an engine for economic growth that is safer and improves quality of life in our communities. The transfer of freight from road to rail has an important part to play in a low carbon economy and therefore helping address climate change[45].

- *Economic benefits, including job growth and economic prosperity*

  The NPS notes that SRFI can provide significant benefits for the local economy.

9.6 In order to achieve the transfer of freight from road to rail and for the Government's forecasts of rail freight to be achieved, a network of SRFI is needed across the regions to serve regional, sub-regional and cross-regional markets[46]. The alternative options to address the drivers of need set out in the NPS at Table 4 are considered to be neither viable nor desirable[47]. These options include reliance on the existing rail freight interchanges to manage demand; reliance on road-based logistics; and reliance on a larger number of smaller rail freight interchange terminals (see table 9.1 below).

[44] Paragraph 2.42, NPS

[1] Rail Freight forecasts to 2023/4, 2033/4 and 2043, Final Report, MDS Transmodal, April 2013

[2] Page 15, Network Rail Freight Market Study, October 2013

[45] Paragraph 2.53 of the NPS

[46] Paragraph 2.54 of the NPS

[47] Paragraph 2.55 of the NPS

Table 9.1: Options to address need (Table 4, NPS, page 22)

Reliance on the existing rail freight interchange to manage demand	Perpetuating the status quo, by design or default, is simply not a viable option. Road congestion would continue to increase and the deep-sea ports would face increasing difficulties in ensuring the efficient inland movement of the forecast growth in the volume of sea freight trade, causing port congestion and unacceptable costs and delays for shippers. This would constitute a constraint on economic growth, private sector investment and job creation.
Reliance on road based logistics	Even with significant future improvements and enhancements in the Strategic Road Network the forecast growth in freight demand would lead to increasing congestion both on the road network and at our ports, together with a continued increase in transport carbon emissions. Modal shift to rail therefore needs to be encouraged. This will require sustained investment in the capability of the national rail network and the terminals and interchange facilities which serve it.
Reliance on a larger number of smaller rail freight interchange terminals	The increasing performance and efficiency required of our logistics system would not allow on an expended network of smaller terminals. While there is a place for local terminals, these cannot provide the scale of economies, operating efficiencies and benefits and linkages offered by SRFIs.

9.7 All of the above options have been considered by Government and discounted and the fundamental conclusion is that there is considered to be a compelling need for an expanded network of SRFI[48].

9.8 The Proposed Development is well placed to contribute to the overriding Government objective of the transferral of freight from road to rail through an expanded network of SRFI.

A Network of SRFI

9.9 It is clear that National Policy establishes the need for a network of SRFI across the Country in locations which have access to road and rail infrastructure and the markets

[48] Paragraph 2.56 of the NPS

they are intended to serve. This means that different regional geographies need to be supplied and there is no policy based restriction or geographical restraint on the number of SRFI required across the Country or across specific regions to meet demand. In this context, the NPS makes it clear it is for the market to determine the viability of particular proposals.[49]

9.10 In market terms, operator requirements are the key driver, set against a wider market context where the vast majority of current warehousing has no prospect of rail accessibility now or in future. A greater availability of space and improved connectivity between rail infrastructure and its markets will serve to encourage business to make more use of these facilities, with the commensurate environmental benefits, compared to a do-nothing option wholly reliant on road haulage and the highway network. Indeed, at a national level, newer SRFI facilities are emerging to fill identified gaps in the national network and clusters are beginning to form. Examples of SRFI emerging to deliver a network of sites include:

- Port Salford, serving the Greater Manchester conurbation of the North West, between Widnes 3MG serving the Liverpool conurbation to the west and Wakefield Europort to the east;
- iPort Doncaster, serving the east of Yorkshire and Humberside, with Wakefield Europort serving the west of the region;
- East Midlands Gateway (EMG) to serve the area north of DIRFT and south of iPort/Wakefield Europort;
- East Midlands Intermodal Park, serving the area between East Midlands Gateway, the North West, Yorkshire & Humberside;
- West Midlands Interchange, serving the Black Country, mid-Wales and the rest of the area between the Midlands and North West;
- Radlett and Howbury Park, serving London and the South East; and
- Rail Central and/or Northampton Gateway serving the area south of DIRFT and Northamptonshire.

9.11 The emergence of clustering reflects the experience of continental Europe, the scale of demand for SRFI in specific locations and major markets reflecting the success of the concept, e.g.:

(i) Hams Hall SRFI and Birch Coppice SRFI – less than 10km apart

(ii) East Midlands Gateway SRFI and East Midlands Distribution Centre RFI – less than 3km apart; and

[49] See for example paragraph 2.58 of the NPS

(iii) DIRFT I, II and III (within which 4 separate RFI facilities effectively compete for business), to be supported by an emerging cluster of Rail Central and/or Northampton Gateway

9.12 The success of these co-located SRFI is not accidental; it is a direct response to meeting demand and growth in rail freight accessibility in the markets they intend to serve. It also echoes the pattern of road-served distribution parks which also exist in clusters around major highway intersections (e.g. motorway junctions).

9.13 This is largely being achieved by new occupiers and businesses within those markets utilising rail freight (which is fully consistent with the policy objectives of the NPS) rather than diverting rail freight traffic from elsewhere. Indeed, it would be impractical, and against the grain of the NPS, for customers to rely upon remote facilities elsewhere to meet its own freight requirements.

9.14 The need for a network (and co-existence) of SRFI and the need to be located near the target markets, rather than relying on existing or remote facilities, is supported by survey data made available as part of the case for the application for the expansion of DIRFT.[50] The survey illustrates the role that DIRFT plays in serving a cluster of large scale warehousing in Northamptonshire and Leicestershire. The survey work identified the destination of outbound lorry movements emanating from the main RFI facility on site to their first destination from the rail terminal, demonstrating that 27% of this rail-related traffic stays on site (i.e. goes to warehousing within DIRFT itself, thus demonstrating the benefit of large-scale warehousing's ability to gain maximum benefit from the rail access), with a further 16% bound for the nearby Magna Park distribution park, 11% to Northamptonshire and 4% to the remainder of the East Midlands. The information also identifies that 65% of these rail-related HGV trips from the rail terminal at DIRFT travelled 10 miles (15km) or less to their first destination.

9.15 This reinforces the need for a network of SRFI to serve major conurbations (particularly in strong areas of warehousing supply and demand such as Northamptonshire) and for SRFI to be located in areas that will maximise rail freight traffic and minimise the secondary distribution leg by road, in accordance with the NPS.[51]

9.16 Notwithstanding this, there will also be occupiers of any SRFI that will distribute goods beyond this immediate catchment area. Such provision is likely to be provided in the form of National and Regional Distribution Centres, which seek to distribute goods from a single national warehouse or from one of two regional centres. While future occupiers will undoubtedly seek to immediately harness the rail connectivity available (such as Tesco and Sainsbury's at DIRFT), they will also still require prompt and immediate access onto the strategic road network which will give swift access to the greatest amount of UK population which is economically feasible. In this sense, SRFI are no different to road-based large scale distribution parks, and it is thus not surprising that the area around the 'Golden Triangle' has such a critical mass of warehousing, as the geographic location and onward transport links can reach 90% of the UK population within 4 hours. This is why the NPS requires SRFI to be developed in a form that can accommodate both rail and non-rail activities (paragraph 4.83).

[50] DIRFT Need Report, NLP, page 63, October 2012
[51] Paragraph 2.44 of the NPS

9.17 The Proposed Development therefore fully displays the distinguishing features necessary for any successful and viable SRFI:

- Proximity to the main Strategic (Rail) Freight Network, to facilitate the movement of freight traffic regionally, nationally and internationally;
- Proximity to the Strategic Road Network, to provide complementary access to the rail network, particularly for distribution into the surrounding regional and local area;
- Proximity to existing clusters of warehouse occupiers and other companies which currently do not have accessibility to the network but, with rail access available, can facilitate the gradual conversion from road to rail for parts of their supply chains;
- A large amount of distribution floorspace on site (either directly rail connected or rail served) which immediately increases the amount of floorspace available to businesses wishing to benefit from rail access and integrated interchange facilities.

9.18 An assessment of the Proposed Development against the specific location criteria as set out in the NPS is provided in Section 10 of this Planning Statement.

Market Demand

9.19 A draft Market Demand Statement (MDS) has been prepared by the joint Applicant for consultation. The MDS confirms the following:

- In order to service growing demand, an increasing array of distribution and storage solutions will be required and that, inclusive of this, distribution centres which are rail served are (likely to be) a key requirement of the logistics market from here on in.
- There is a high level of demand for distribution warehousing with good access to the motorway network driven by the move towards 'just in time' logistics fuelled by the substantial increase in on-line retailing.
- The demand for larger warehousing space is increasing. The average size of warehousing required by occupiers increased nationally by 18% from around 22,000 sqm (238,000 sqft) to over 26,000 sqm) 281,000 sqft. East Midlands has witnessed a take up on average 1.6m sq (148,644 sqm) of take per annum in warehousing over 46,451 sqm (500,000 sqft) but there are currently no buildings in the East Midlands capable of satisfying the needs of these occupiers.
- Rail Central located in the heart of the East Midlands which has witnessed the largest take-up for warehousing, averaging 427,000 sqm per annum for the last five years. Around 55% of this take up has been centred on the Northampton market. Notwithstanding this, Northampton witnessed a decrease in take up reducing to 126,000 sqm as a result of existing stock reducing to 446,000 sqm –

just over 12 months' supply. Supply continues to fail to keep pace with the fundamental shift in demand requirements.

- The Northampton market is therefore currently chronically constrained leaving customers without the right size and quality of space sought. Gazeley GLP is therefore witnessing a number of customer enquiries that have, as yet, gone unsatisfied.

- Given its geography and its proximity to the strategic network (rail and road), Rail Central is uniquely placed to satisfy the growing demand from e-commerce, retail and manufacturing businesses for well connected, modern warehouse space from which to serve local and national customers by road or rail.

- Gazeley GLP consider that there is extremely strong demand in the local area and it is expected this is to continue to only grow in the future.

Alternatives

9.20 A Draft Alternative Sites Assessment (ASA) has prepared on behalf of the Applicant to inform the consultation.

9.21 The assessment of alternative sites has been undertaken in two main stages. These stages are linked directly to the consultation process undertaken for the Application.

9.22 For the Phase 1 consultation, an Assessment of Alternatives was included within the original PEIR. The methodology adopted was simple and focussed on considering sites that local interest groups, stakeholders and the public had suggested could be possible alternatives. It also included sites that had been shortlisted in the assessment undertaken for the DIRFT assessment, as these are potential rail freight sites already identified within a similar catchment area to the Rail Central proposal.

9.23 The preliminary ASA has been undertaken to supplement the earlier exercise. It adopts a more rigorous approach, using a defined methodology. This assessment has applied several distinct stages of work to identify possible alternative sites. It has employed a sieve mapping technique using Geographical Information System (GIS) software, over a broad search area comprising the East and West Midlands. This was used to identify sites with good rail access, close to motorway junctions and with very few environmental constraints.

9.24 The sites were then scored using a common scoring matrix, which was designed to identify the best performing potential rail freight sites. The scoring prioritised factors including proximity to motorways, access to high gauge rail lines, local access routes, site levels, shape, size and proximity to sensitive land uses.

9.25 Further sites not identified in the screening exercise but which had been suggested by local representation or short listed in other similar studies were included in the analysis and scored using the same matrix.

9.26 The scores achieved by each of the sites identified was then reviewed and the highest scoring sites selected from comparative analysis. This process was subjective and focussed around the topics identified as important in the scoring matrix.

9.27 In summary, the key stages of assessment were:

Stage 1: Area of Search and Sieving

9.28 This sieving exercise focussed on a GIS based approach to mapping key infrastructure and environmental constraints. The following factors were mapped using data from data.gov, Historic England, Natural England, Environment Agency and GIS software:

(i) 5km distance from Motorway Junctions[52].

This ensures that the sites selected for review accord with the NPS criteria of having good road access and being capable of accessing the supply chain routes and major urban areas which are likely to be the ultimate destination of many of the goods handled by the development. The 5km threshold has also used by previous alternative sites assessment undertaken for previous/existing SRFI proposals including Howbury, Radlett, DIRFT and West Midlands Interchange.

It is not considered appropriate to consider the potential to create new motorway junctions, owing to both the cost associated with such an intervention rendering SRFI projects unviable. There are also significant time-scales associated with the delivery of new motorway junctions and, unless expressly identified in Local Plans to facilitate strategic growth or programmed, there is a Department of Transport's presumption against the construction of new junctions[53]. No new motorway junctions are currently proposed in the search area.

(ii) 5km distance from railway lines.

This ensures that the sites selected can accord with the NPS criteria for having adequate access to the rail network. While a 5km threshold has been adopted, it is acknowledged that that this is a conservative approach as it is likely that identified sites towards the fringe of this range are unlikely to pose realistic and viable alternatives for the market to exploit. The 5km threshold has also used by previous alternative sites assessment undertaken for previous/existing SRFI proposals including Howbury, Radlett, DIRFT and West Midlands Interchange.

(iii) Rail Gauge of W8 and above[54] and contiguous track able to accommodate a 775m train.

[52] Defined as being motorway standard through DfT Circular 02/2013

[53] See DfT Circular 02/2013

[54] Based on manual logging of the routes using Network Rail information

This ensures that the sites selected can accord with the NPS criteria for having a suitable loading gauge and the ability to accommodate longer trains.

(iv) Environmental designations based on www.magic.gov.uk datasets.

This ensures that the sites selected can accord with the NPS criteria for avoiding environmentally sensitive areas.

9.29 These datasets were used to identify locations where there is a combination of good access to the strategic road and rail networks, with no or limited environmental constraints. This included reviewing existing Green Belt boundaries. It is recognised that the national need for development weigh in favour of NSIPs, even if this would result in the loss of existing local designations, including Green Belt land. Notwithstanding this, in this preliminary Assessment it is recognised that there are numerous alternative sites that would not require the loss of Green Belt land. Therefore, land identified as being within the Green Belt was sieved out in the early stages, identified as being inferior, in policy terms, to non-Green Belt designated land.

9.30 The outputs were used to further reduce the area of search. The next stage was to review the more detailed mapping to determine site boundaries which had the potential to offer train access with limited effects based on the physical infrastructure in the area, including roads, housing and other sensitive uses, canals, etc. This exercise was based on the professional judgment of the Applicant's team.

9.31 Once the sites had been identified, topographical data, flooding data, agricultural land classification and environmental constraints data was used to inform the site specific assessment.

9.32 Following this, workforce availability data, in the form of jobseeker's allowance (JSA) applicants and economically inactive people looking for a job, was obtained for the local authority area in which the Order Limits for the Main SRFI Site sit, and the immediately adjoining local authority areas. These were added to the qualitative discussion of the site scoring as a measure of whether labour availability would be likely to be a constraint to achieving a successful SRFI.

Stage 2: Site Assessment

9.33 Sites identified through the sieving process were combined with the sites identified in the initial alternatives assessment in April 2016. These sites were then subject to a qualitative analysis, focussing on the following factors:

- Proximity to a motorway junction;
- Access to rail network;
- Vehicle access routes;
- Site size;
- Site shape;

- Topography[55]; and
- Proximity to and potential effects on residential or other sensitive land uses.

9.34 For each identified site, local plan and land use designations were identified and each was scored using a sliding scale of -2 to +2. This scale was appropriate given the level of information available relating to potential sites and the specific NPS and NSIP thresholds which influence individual banding. Addressing the sites with a more finely grained scale would have required additional assumptions to be made, bringing in potential inaccuracies in grading and ranking.

Stage 3: Assessment of previously short-listed sites

9.35 This stage involved undertaking a review of the initial alternatives assessment work undertaken and scoring the sites identified as having rail access potential. This was undertaken to ensure that every site considered by the Applicant has been scored against a consistent framework.

Sites which have no direct rail connection have been discounted and are not analysed further. However, sites which are capable of gaining rail access have been scored.

Stage 4: Assessment of Rail Central

9.36 This stage scored Rail Central against the common scoring matrix, to allow comparative analysis of the considered sites.

9.37 The scoring matrix has been utilised to produce the following results for Rail Central.

Table 3.1: Matrix Scoring Results for Rail Central

Factor	Score	Notes
Proximity to a motorway junction	1	The site is 1.9km from J15a of the M1
Access to Rail	2	The site has access to two W10 gauge route sections, the Fast Lines via Weedon and the Slow Lines via Northampton.
Vehicle access routes	2	Site access will be taken directly off the A43 with no need to travel through either Milton Malsor or Blisworth.

[55] Site size, shape and topography were included because in addition to the factors set out in the NPS they are practical issues which affect; whether a site can accommodate a SRFI, which has a defined minimum size in the Planning Act; whether a critical mass of development can be achieved which is both viable and likely to generate the economic benefits of clustering similar uses together around a common rail facility; whether the site can accommodate large floorplate buildings which for both practical and institutional investment purposes need to be large, rectangular and have large yard areas; and finally topography is important as a level access needs to be achieved for the rail connection.

Site size	2	291Ha
Site shape	2	The site has large regular areas capable of accommodating multiple large floorplate buildings, with long straight sections of site adjacent to rail infrastructure
Topography	2	The site is largely flat with little earth working required to achieve level rail access.
Proximity to and potential effects on residential or other sensitive land uses	0	The site is close to residential properties along Northampton Road. However, the parameters plan, master plan and assessment work in the PEIR show that there is adequate provision to ensure potential effects can be mitigated.
Total	11	

Stage 5: Comparative Assessment

9.38 Once each site had been allocated a total score, the site scores were tabulated and ranked.

9.39 All the sites were then considered qualitatively to address any limitations inherent in the scoring approach, alongside the Main SRFI Site. A professional judgement was made on the performance of each site and an overall comparative assessment made with the Main SRFI Site against the site selection criteria.

Table 3.2: Matrix scoring results for Comparative Assessment

Site Number	Site Name	Site Score
-	Rail Central	11
15	Northampton Gateway	11
5	Land at Burbage Common	11
9	Kilsby North	9
25	West Midlands Interchange	9
24	Etwall Common (East Midlands Intermodal Park)	7

Etwall Common (East Midlands Intermodal Park (EMIP))

9.40 The project was subject to informal consultation with a timeline for commencing formal consultation in May 2014, with submission of the application in Spring 2015. The development was subject to a screening request and opinion in Summer 2014 and screening opinion was issued by the PINS in September 2014.

9.41 The latest project update available on the PINS website confirms that the applicant has not yet set a timetable for the project. However previous updates on the PINS website dated September 2016 confirmed that the developer was preparing a SOCC and intended to formally consult in late 2016 / early 2017. It noted that technical rail work (GRIP stages 1 and 2) were complete and the submission of the application was to be anticipated in the first quarter of 2017. No further update on the project has been provided on the PINS website or the SRFI website. While this in itself is not problematic, it does suggest that the project remains in the initial phase of development, with the creation of SRFI facilities not likely to be delivered in the immediate future. Comparison with Rail Central suggests that it is at least eighteen months behind in programme terms.

9.42 In the alternatives assessment presented during the Phase 1 consultation process for Etwall Common, it was noted that this site would address a more northerly market area than Rail Central, centred on an area of existing manufacturing (Toyota, JCB, Nestle, Rolls Royce, Bombardier). This is still considered to be the case, particularly in respect of Toyota whose factory is located immediately north of the site. The site also has limitations as it is more distance from the motorway network than Rail Central, despite there being good A Road access to the M1.

9.43 This site is considered to be a good SRFI site and it is being promoted by a reputable logistics developer. However, it is located significantly further north than Rail Central in the search area, and is therefore likely to attract interest from a more northern catchment (focussing upon Derby and Nottingham to the north) as well as catering for potential local demand from an existing cluster of operators. Furthermore, its distance from the strategic road network, and existing rail gauge issues, taken with the low score achieved on the scoring matrix in comparison to Rail Central, the site is not particularly high performing for SRFI development. Notwithstanding this, should the site come forward as a SRFI, it could become complementary to Rail Central due to its geographical differentiation.

West Midlands Interchange

9.44 On the scoring matrix, the site scored 9 points. Measuring 297Ha, the site is a considerable size and has minimal constraints that could restrict the future delivery of the site. Notwithstanding this, there is a significant level change between the West Coast Main Line and the surrounding site area. Gaining suitable rail access will therefore require significant levelling works to be undertaken. From recent consultation information it is understood that this level change can be addressed.

9.45 A SRFI proposal is currently coming forward on the site, whilst information provided within the draft PIER for this site has been used to inform this assessment and work is progressing on an application through the DCO process.

9.46 The PEIR for the development discusses the various impacts that are a result of the proposals. These primarily include adverse impacts on heritage, ecology and nature, landscape and noise and the proposals have sought to mitigate and minimise where possible in accordance with the NPS.

9.47 The key differences in the scoring of the site against the Rail Central scheme are that WMI has closer access to the Motorway, whilst Rail Central has access to two W10 rail lines.

9.48 Having access to two W10 railway lines allows Rail Central to offer services to the emerging Express Freight market, which allows it to better utilise the faster moving WCML. This is a clear distinction between the two sites which suggests that Rail Central is more adaptable to anticipated future changes in the rail freight market.

9.49 Whilst access to the motorway is closer at the West Midlands Interchange scheme, this is only marginally better than the Rail Central scheme, where routes utilise A roads and do not pass through predominantly residential areas. Conversely, access to two W10 rail lines is considered to be a much greater advantage.

9.50 Furthermore, from a planning policy perspective, the WMI is located within the Green Belt. This sets a requirement on the forthcoming DCO application to demonstrate very special circumstances for the release of land from the Green Belt and subsequent departure from the development plan. This factor further separates WMI and the Rail Central scheme, with Rail Central again being preferable from a planning policy position.

9.51 Providing that the planning basis for providing an SRFI on land in the Green Belt can be adequately justified, WMI is a relatively high scoring site. Much like the sites assessed beforehand, WMI would operate in a very separate market area to Rail Central. Therefore, the site should be considered to be a complementary SRFI site, as opposed to an alternative to Rail Central.

Kilsby, North

9.52 This site scored 9 points on the scoring Matrix. It is clearly a strong site which has the characteristics of a good potential rail freight site.

9.53 This site was considered in detail in the DIRFT III assessment. That assessment considered a larger site, the northern part of which is included in this assessment. The southern part of the site assessed by the DIRFT III team was discounted from their analysis.

9.54 The DIRFT III assessment considered that this northern section of the site was considered to be capable of accommodating a limited form of rail freight development. However, it concluded that the shape of the site created limitations on rail layout, which would affect path availability for other passenger and freight trains, and left little site capacity to accommodate warehousing as well as an intermodal facility.

9.55 This site clearly has merit as a SRFI location. However, this site scores lower than Rail Central and has acknowledged technical difficulties in delivering a similar quantum of rail served floorspace. Based on the scoring matrix and the above analysis, Rail Central may appear to be the better SRFI site; however Kilsby North still represents a good alternative and potentially complementary site for SRFI development.

Land at Burbage Common

9.56 The site generally scores well on most measures within the scoring matrix. It is at the early stages of being promoted as a SRFI by a reputable logistics developer. It is within close proximity of the strategic highway network, with proposals to secure access on to the M69, and has access to a W10 rail line.

9.57 Land at Burbage Common achieves the same score in the matrix as Rail Central, which is a reflection of the sites location in proximity to important transport infrastructure and the lack of environmental constraints identified on the site. Notwithstanding this, the site is only at the early stages of being promoted for SRFI development. As such, limited information regarding the proposals has been available to fully assess the potential SRFI scheme at Burbage Common.

9.58 However, this analysis has highlighted a number of key issues that will need to be addressed through the detailed design of the scheme. These include the proximity to sensitive biodiversity designations, impact on the permanent caravan sites to the south and the ability to find a feasible access route to the site.

9.59 Notwithstanding this, although the site has been identified within this alternative site assessment exercise, it is almost 50km to the north west of Rail Central. It is therefore likely to function in a different market area, attracting from a more northern market.

9.60 Although the site at Burbage Common may be a good SRFI site on its own merits, this can only be confirmed upon the review of more detailed information when it is available. For these reasons and similarly to the other sites considered as part of this assessment, Land at Burbage Common could function as a complementary SRFI to Rail Central.

Northampton Gateway

9.61 This site scores well on most measures in the scoring matrix. It is currently being promoted as a SRFI by a reputable logistics developer. It has good access to the motorway network and access to a W10 rail line.

9.62 Northampton Gateway achieves the same score in the scoring matrix as Rail Central which is a reflection of the strategic nature and strength of this area as a location for rail freight development. This also reflects one of the limitations of the adopted methodology, in that it does not allow a fine grained enough analysis of sites in comparable areas, or adjacent to each other. This is why this qualitative analysis is provided for in the methodology. We also note that the national policy aim is not to select the best SRFI site; it is to create a network of SRFI's and to ensure the growth of rail freight capacity and the associated economic and environmental benefits of this sector.

9.63 In assessing the degree and scale of environmental impact, it is important to note that Rail Central is almost 30% larger in site size than Northampton Gateway. Despite this, both Rail Central and Northampton Gateway will generate broadly the same degree and magnitude of environmental impact. There are, however, some variations and these are summarised below and based on information publicly available to date:

(a) Landscape and Visual

We would not agree with the conclusions of the Northampton Gateway PEIR, which confirms that the Northampton Gateway scheme does not give rise to significant residual landscape character effects to its site and its immediate context; we consider, upon our review, that the landscape effects are comparable to Rail Central.

In terms of visual effects, Northampton Gateway is relatively more remote from residential properties and settlements than Rail Central and, as such, Rail Central is the more prominent and larger development. Northampton Gateway is likely to affect fewer receptors overall, although there is not a material difference between the two schemes.

It is acknowledged that Rail Central will likely affect more residential receptors than Northampton Gateway which reports none. From detailed analysis undertaken at the Rail Central site, it is considered unlikely that the proposals will lead to no significant residual effects in respect of residential receptors. Rail Central affects fewer public rights of way and fewer roads.

Rail Central residual effects are reliant on agreeing adaptive mitigation. It is not clear at this stage due to the lack of detailed information, what Northampton Gateway relies upon and this presents difficulties in providing a direct comparison. However, in general terms, Rail Central is likely to give rise to a greater degree of impact but taking all matters into account, the overall level of and extent of effects are very similar.

(b) Ecology

The baseline ecological conditions are similar for both Rail Central and Northampton Gateway, as are the predicted impacts. Both schemes consider that their impacts can largely be mitigated for, leaving only a few residual minor adverse impacts as well as beneficial impacts. The ecological impact assessment for Northampton Gateway indicates that the majority of impacts are not considered significant and that the majority of adverse effects will be off-set in the mid- to long-term by the creation and favourable management of ecological habitat. It acknowledges that the loss of arable fields will lead to the unavoidable displacement of some specialist farmland birds (the Northampton Gateway site is used by Golden Plovers, which the Rail central site is not). The impacts associated with Rail Central will be similar.

The principal difference is that Northampton Gateway is not offering any off-site or large area of dedicated ecological mitigation or compensation habitat (as distinct from landscape planting provision having a dual role). For Rail Central, we consider that due to the larger site area, the impacts (particularly on farmland birds and hedgerows), cannot be adequately mitigated or compensated for by the provision of new habitat in the on-site landscape planting alone (though this will redress a substantial part of the impact). The Rail Central assessment identifies adverse residual impacts on veteran trees which are an irreplaceable resource (the Northampton Gateway assessment only has one veteran tree, whereas the Rail Central site has forty four). Rail Central will also affect a PWS at J15a however, the additional off-site mitigation area

provided at J15a allows Rail Central more scope to compensate for these few differences through net gains to biodiversity.

(c) Cultural Heritage

The Northampton Gateway scheme is likely to result in a number of 'moderate adverse' effects on heritage assets within the immediate area, which are considered to result in 'significant environmental effects'. The PEIR for Northampton Gateway identifies that this principally relates to the Milton Malsor Conservation Area and the listed buildings within it, together with Collingtree and Courteenhall Conservation Areas and Registered Parks and Garden. This is as a result of the construction and operation of the main development site. It does not however identify any effects on heritage assets as a result of the highway works. Given the proposed route bypass, it is likely that this will give rise to some adverse effects on heritage assets around Courteenhall and Roade. The PEIR concludes that there are 6 heritage assets which are considered to be affected by the scheme.

The Rail Central schemes results in 'moderate adverse' effects on a number of heritage assets. These principally relate to Milton Malsor Conservation Area and the listed buildings within it (as a result of the Main SRFI Site) together with the Grand Union Canal Conservation Area and the listed locks within it (as a result of the J15a Works). The PEIR for Rail Central concludes moderate adverse effects on six heritage assets which are considered to be affected by the scheme, together with lower / less significant effects to other heritage assets.

Both schemes affect heritage assets within their immediate vicinity but due to their differing locations, it is different assets which are affected. An example of this is where the Rail Central scheme involves adverse effects to heritage assets along the Grand Union Canal (as a result of the J15a Works) and the Northampton Gateway scheme does not. The Northampton Gateway scheme does however have the potential to affect heritage assets such as the Courteenhall Registered Park and Garden and Collingtree Conservation Area whereas Rail Central does not adversely affect these. Overall, the proposals are likely to have a similar level of environmental impacts on heritage assets, albeit the assets affected would differ.

(d) Agriculture

Northampton Gateway would involve the loss of 195ha of agricultural land, of which 33ha (17%) is best and most versatile (BMV) land in Grades 2 and 3a, with the remainder classified as moderate quality Subgrade 3b. This loss is assessed as a moderate adverse effect. Rail Central would involve 298ha of agricultural land, of which 89ha (30%) is BMV. This loss is also assessed as a moderate adverse effect.

(e) Transport

Based on information contained within the Northampton Gateway Phase Two Consultation, the site is forecast to result in a total of 1,044 two-way vehicle

movements during the AM peak hour and 1,303 two-way vehicle movements during the PM peak hour.

In comparison, Rail Central is forecast to result in a total of 1,233 two-way vehicle movements during the AM peak hour and 1,566 two-way vehicle movements during the PM peak hour. Therefore, in general terms, it can be seen that Rail Central is likely to result in a higher trip impact than Northampton Gateway before any mitigation schemes are taken into account. This is due to the fact that Rail Central is a larger scheme than Northampton Gateway.

The proposed mitigation associated with Rail Central is appropriate to minimise the residual impact of the proposals. It is not clear whether the impact of Northampton Gateway on the local highway network has been fully assessed and mitigated as appropriate, from the information available within the public domain.

The distribution of traffic set out in the Northampton Gateway Phase Two Consultation indicates that there is forecast to be a large number of vehicle movements along the A45. It is not clear from the publicly available information whether the impact of the development on junctions along the A45 to the north of the Queen Eleanor Roundabout has been considered.

In contrast, the impact of Rail Central at junctions along the A45 to the north of the Queen Eleanor Roundabout has been assessed, and these junctions are shown to be under significant stress in the 2021 and 2031 baseline scenarios (i.e. without either proposed development). It would be reasonable to assume, therefore, that the impact of Northampton Gateway at these junctions requires assessment, and potentially the provision of improvement schemes. Improvements are proposed at these junctions to address the impact of the Rail Central proposals.

In addition, the Northampton Gateway traffic distribution indicates that a large number of vehicles would ‘rat-run’ along minor roads to the west of the A508 and through local villages. Whilst mitigation is proposed by Northampton Gateway to improve capacity at some (but not all) of the junctions at either end of these minor roads, the links themselves are narrow and unlikely to be appropriate to accommodate additional traffic. Mitigation has not been proposed to improve these links, or alternatively to discourage the use of these routes.

The impact of Rail Central on perceived ‘rat-run’ routes has been assessed. Traffic modelling work indicates that there is no significant impact on these routes as a result of Rail Central.

Based on the information available within the public domain, following the implementation of their respective highway mitigation schemes, the residual traffic impact of Rail Central is likely to be lower than the residual traffic impact of Northampton Gateway.

9.64 With regards to the variations on environmental impact, despite Rail Central being significantly larger in site area, the environmental effects are deemed to be largely comparable to those of Northampton Gateway.

9.65 The variations in environmental impact, despite Rail Central being significantly larger do not suggest that Rail Central is an inferior site compared to Northampton Gateway in environmental impacts terms.

9.66 It is also important to consider both schemes in respect of the operational and technical aspects being proposed within each SRFI proposal; these are presented below.

9.67 The table below (Table 9.1) presents a number of key differences. Rail Central offers significantly more commercial floorspace than Northampton Gateway, it is also anticipated to generate more jobs (over 8,000) and has the potential to transfer more road freight to rail. Rail Central also provides direct access to two W10 railway lines and full connectivity between them. This enhanced flexibility and resilience in its infrastructure puts Rail Central at a distinct advantage. This allows direct and quick access to its Express Freight Interchange as opposed to Northampton Gateway which requires more time through the need to shunt within the site.

9.68 Rail Central also provides a range of additional facilities which aid the attractiveness of the SRFI as well providing positive consequences to the efficiency of the rail network.

Table 9.1 : Rail Central and Northampton Gateway Comparison

	Rail Central	Northampton Gateway
Rail Connections	Rail Central has 4 main line access points onto two separate branches of the WCML (Fast and Slow Lines)	2 main line access points onto one branch of the WCML (Slow Lines)
Rail Inter-Connectivity	Full inter-connectively provided which Rail Central benefits from a range of routing options ensuring rail services are resilient and efficient. This also enables main line access to be maintained throughout when either the WCML Fast Line or Slow Line is closed for maintenance.	No direct interconnectivity provided between WCML Fast and Slow lines, access to Fast lines only available via at-grade crossings 4 miles to the south (Hanslope Junction) and 20 miles to the north (Hillmorton Junction) Northampton Gateway will lose main line access when maintenance is carried out on the WCML Slow Lines facing the site.
Overall Commercial	c.7.4m sqft warehousing space	5 million sqft warehousing space + 1.6m sqft mezzanine

Floorspace		provision
Trains per day and capacity for growth	First phase of rail operations with 4 trains per day in and out of site, growing commensurate with warehousing and interchange facilities. The GB Freight Model (used in NR Freight Market Study as endorsed by NPS) indicates that 7.4m sqft of floorspace would generate the equivalent of 13 intermodal trains per day in and out of site.	Rail Operation Report suggests that 4 trains per day each way will be achieved growing to up to 16 trains per day as the critical mass of development grows. On a like-for-like comparison, the GB Freight Model output suggests the equivalent level of rail freight traffic from 5m sqft of floorspace would be 9 trains per day in and out of the site.
Rail Connected Floorspace	Approximately 2.22m sqft	Approximately 3.3m sqft
Electrification	Electrified access at an early stage of development	The draft Rail Ops Report, submitted in support of the Stage 2 Consultation confirms that Northampton Gateway "will be able to accommodate electric freight trains when the […] market requires".
Express Freight Terminal	Rail Central has direct and dedicated electrified access on WCML (Fast Lines) for express freight trains, allowing trains to arrive and depart in either or both directions with no intermediate shunting. Internal electrified access to the WCML Slow Lines provides continuity of access when the Fast Lines are closed for maintenance.	Northampton Gateway requires intermediate shunting of all express freight trains between the main line and the terminal, significantly slowing the processing of trains through the terminal.
Sidings	Rail Central has 8 x 775m sidings (6 accessible by cranes with 2 electrified)	Northampton Gateway has 6 x 775m sidings (5 accessible by cranes assuming outer line in electrified)
Other rail-related facilities	Rail Central proposes a Train Maintenance Depot allowing trains to be stabled,	Operational Control Room

	maintained and fuelled on site rather than at off-site locations. This reduces the need for trains to be moved off site, maximising the efficient use of available mainline capacity Operational Control Room	
Aggregate Rail-head	Not provided	Provided
GRIP Feasibility	Network Rail has informed the design of the rail infrastructure and main line connections; the assessment to GRIP2 validating technical and operational feasibility of the main line connections	No reference has been currently been provided to any GRIP feasibility work having been undertaken with/by Network Rail
Transport Access	Direct access onto the A43 (T) and then onto J15 of the M1. The A43(T) provides alternative strategic route on the trunk network to surrounding towns such as Towcester	Direct access on the J15a of the M1
Road to Rail	Rail Central would lead to reduction of just under 53 million HGV-km per annum when compared to a road connected development with the same quantum of floorspace at the same location; this approximately is a 20% reduction. Rail Central will generate around £19 million of wider environmental benefits per annum.	Once operational, the SRFI could accommodate an average maximum throughput of around 1,384 containers a day which would equate to a mode shift from road freight to rail freight of 928 HGV loads or 1,856 two way HGV movements per day.[56]

[56] Directly comparable information is not available in respect of Road to Rail. In relation to the Rail Central scheme a recognised freight model to forecast the expected traffic for Rail Central and the expected mode shift against the comparator scenario (the GB Freight Model) has been utilised. This is approach is currently being used to update Network Rail's long term freight forecasts and was previously used to forecast freight for their Freight Market Study in 2013 (ultimately used to underpin conclusions contained within the NPS). Information prepared for Northampton Gateway has not used this recognised approach.

Economic Benefits	Estimated 8,100 gross full time equivalent (FTE) jobs. This takes account of: The lower employment densities typically seen in rail-connected warehouses, due to the need to accommodate rail infrastructure; and The absence of detailed design and layout information at the current point in time, with internal arrangements dependent upon the operational requirements of the end user.	Estimated 7,547 FTE jobs accommodated through provision of 623,000sqm floorspace. This takes account of: The absence of rail-connected warehouses from the published masterplan, which has enabled the application of higher employment densities in warehouses which are not directly connected to the rail line; and The proposed mezzanine, albeit a lower employment density has been assumed for this space (155,000sqm).

9.69 The other difference between these two sites is their distance to the strategic road network. Whilst Northampton Gateway is closer to J15 than Rail Central is to J15a, the differences in distance are very limited (J15 is located directly adjacent to the Northampton Gateway site and Rail Central is c.2km from Junction 15a) and in practical terms both routes have good connections to the strategic road network. Both routes are on higher class roads and will not involve passing through residential communities. Indeed Rail Central, being positioned on the A43 (T), benefits from significant highway resilience offering alternative access arrangements if necessary.

9.70 Bringing all the analysis together, Northampton Gateway is a strong SRFI site with very good access to the strategic road network. However, whilst it is closer to the motorway than Rail Central, this in itself is not a major distinguishing factor between these two sites. Rail Central is, however, larger in commercial terms and has the ability to connect to the WCML, as well as the NLL; this presents additional operational and technical advantages over Northampton Gateway which make it more resilient, flexible and more adaptable to the changing rail freight market.

9.71 On this basis, it is concluded that the Rail Central site is the better performing SRFI site. However, it is recognised that there is potential for Northampton Gateway to be pursued in addition to the Rail Central site. Both schemes could meet the required demand, especially given the great national need for SRFIs and the clustering of such infrastructure. This scenario has therefore been the subject of a preliminary cumulative impact assessment in the PEIR.

Overall Conclusions

9.72 The ASA has demonstrated that, despite the large area of search, the development opportunities for SRFI proposals are limited. A total of twenty five locations were identified as satisfying key SRFI characteristics as defined by the NPS. Of these, only five locations present realistic SRFI opportunities and were identified for further comparative analysis. Within this context, it is not surprising, therefore, that four of the five alternative sites assessed for further comparative analysis are the subject of on-going DCO applications for SRFI proposals and each has the potential to provide SRFI facilities.

9.73 Indeed, this in itself demonstrates the rigour of the assessment methodology and is a reflection of the East and West Midlands being a significant area of developer interest to deliver a network of SRFI to meet burgeoning demand. It is also reflective of the NPS which makes it clear it is for the market to determine the viability of particular proposals. All shortlisted sites comprise greenfield and all would result in the loss of agricultural land and various elements of biodiversity. Comparison of environmental benefits is difficult due to the size and scale of SRFI development and the individualistic nature of each candidate site. Environmental impacts vary but are of broadly the same magnitude and it is not the case that one site is clearly preferable to another, in terms of development effects. Three of the short-listed locations are the subject of SRFI DCO proposals which, if consented, are considered to operate and serve a different core catchment area of the East and West Midlands to that of Rail Central.

9.74 The study concludes that there are two clear top performing sites – Rail Central and Northampton Gateway that would seek to serve broadly the same core catchment area. They score the same using the scoring matrix. There are differences in performance between these two sites which allow them to be distinguished.

9.75 Northampton Gateway is a strong SRFI site with very good access to the strategic road network. However, whilst it is closer to the motorway than Rail Central, this in itself is not a major distinguishing factor between these two sites. Environmental impacts, whilst varied, are broadly of the same magnitude. Rail Central does however, have the ability to directly connect to the WCML, as well as the NLL and this presents, along with its additional infrastructure, enhanced operational and technical advantages over Northampton Gateway which make it more resilient, flexible and more adaptable to the changing rail freight market.

9.76 On this basis, it is concluded that the Rail Central site is the better performing SRFI site. However, it is recognised that there is potential for Northampton Gateway to be pursued in addition to Rail Central. This scenario has therefore been the subject of a preliminary cumulative impact assessment in the PEIR.

9.77 Overall, therefore, it is the conclusion of this preliminary report that there are limited SRFI opportunities with the broad search area. Comparisons of environmental impacts are difficult, due to contrast in scale of each site but none of the other sites creates development opportunities that are of clear environmental, operational or market benefits when compared to Rail Central.

9.78 Four of the five sites which present realistic development SRFI opportunities are the subject of developer interest and are being pursued through the DCO process. Three of these locations would serve a different core catchment area to that of Rail Central

and do not present realistic alternatives. They would, however, provide complementary facilities to Rail Central and contribute to the required network of SRFI facilities as required by the NPS with the overriding objective of securing access to the rail network and fostering the transfer of freight from road to rail to support economic growth in an environmentally responsible manner.

Summary

9.79 This section of the Planning Statement confirms the following:

- The NPS confirms that the Government has considered a number of options to accommodate the changing needs of the logistics industry and the anticipated growth in freight traffic which is, and will continue to, fuel economic growth. All options, other than the need to expand the current network of SRFI have been discounted.

- The NPS confirms there is a compelling need for an expanded network of SRFI. There is no policy based restriction of geographical restraint on the number of SRFI required across the Country or across specific regions to meet demand. The Proposed Development would contribute towards the creation of a network of SRFI nationally and locally to serve a part of the Country which displays the highest demand and best geographical characteristics and infrastructure to serve the economy.

- There is an emergence of new SRFI which are seeking to expand the existing network. They are arising in locations where demand is greatest, existing logistic operators are close by and which have excellent access to the Strategic Road Network and the Strategic (Rail) Freight Network.

- The Proposed Development benefits from all the necessary distinguishing features to deliver a successful and viable SRFI.

- Across the West and East Midlands, there are a small number of alternative locations (five) which satisfy the key SRFI characteristics as defined by the NPS. Not surprisingly, four of the five are being subject of on-going DCO applications for SRFI; clearly reflective of the developer interest to deliver a network of SRFI to meet growing demand in the area. No single site is clearly preferable in terms of development effects. Three of the four alternative sites are considered to serve a different catchment area to that expected for the Proposed Development and do not present realistic alternatives. They would present complimentary facilities and contribute towards the require network of SRFI facilities as required by the NPS with the overriding objective of securing access to the rail network and transferring freight from road to rail. Northampton Gateway is a strong SRFI site but it is concluded that the Proposed Development is the better performing SRFI site.

- The MDS explains the response of the property market to the demand for distribution warehousing with good access to the motorway network and the emergence of rail served logistics. It confirms that the Proposed Development is

located within an area of high demand which is only expected to continue in the future.

10. Functional and Locational Criteria

10.1 The NPS notes that the aim of a SRFI is to optimise the use of rail in the freight journey by maximising rail trunk haul and minimising some elements of the secondary distribution leg by road, through co-location of other distribution and freight activities. SRFIs are important in reducing costs and facilitating the transfer of freight movements on both the national and local road networks (NPS paragraph 2.44).

10.2 As explained in the draft MDS, occupiers of warehousing and distribution services are increasing looking to integrate rail freight into their transport operations. This requires the logistics industry to develop new facilities that need to be located alongside the major rail routes, close to trunk roads as well as near to the conurbations that consume the goods. The nature of that commercial development means that some degree of flexibility is needed when schemes are being developed, in order to allow the development to respond to market requirements as they arise (NPS paragraph 2.45).

10.3 SRFIs can provide considerable benefits for the local economy as they are relatively labour-intensive and can therefore create many new job opportunities. The availability of a suitable workforce is also an important consideration (NPS paragraph 2.52).

10.4 As set out above, paragraph 2.56 of the NPS concludes that there is a compelling need for an expanded network of SRFIs. It is for the market to determine where individual SRFIs should be located, but the NPS notes that they should be near the business markets they will serve – major urban centres, or groups of centres – and are linked to key supply chains routes. Given the locational requirements and the need for effective connections for both rail and road, the number of locations suitable for SRFIs will be limited, which will restrict the scope for developers to identify viable sites.

Locational Criteria

10.5 Specific locational criteria for SRFIs are set out in paragraphs 4.84 to 4.87 of the NPS. SRFI should comply with the following provisions:

- have good connectivity both with the road and rail network, in particular the strategic rail freight network;
- are near the business markets they will serve – major urban centres, or groups of centres – and are linked to key supply chain routes;
- are located alongside the major rail routes, close to major trunk roads as well as near to the conurbations that consume the goods; and
- should ideally be located on a route with a gauge capability of W8 or more, or capable of enhancement to a suitable gauge.

10.6 The rationale for Rail Central is driven by its strategic location and direct connections to key rail and road networks. Rail Central positively combines these four factors in the operation of the SRFI as explained within the three headings topic headings below:

(1) *Direct connections to the national rail network*

Rail Central is located on the existing rail freight network, connected via the NLL which is the most important corridor for freight transport within Great Britain and forms a core part of the SFN which is able to handle the longest freight trains using diesel or electric traction and carry containers for deep sea traffic.

In addition (and uniquely for an SRFI), the proposals also makes provision for access to and from the WCML itself mainly for a smaller number of express freight train services similar to those used by the Royal Mail between London, Warrington, Glasgow and Newcastle (and more recently by Eddie Stobart, Sainsbury's and TNT). Access would again be provided from both directions for travel for diesel and electricity-hauled express freight trains.

All four lines are electrified and cleared to W10 loading gauge. This would provide onward access at W10 gauge to the principal deep-sea ports of Felixstowe, Southampton and London Gateway, as well as other ports and (S)RFI at W10 gauge in London, the Midlands, North West, Yorkshire & Humberside, North East and the Scottish Central Belt.

It is also worth noting that all conventional wagon and express freight services are built to operate within the smallest W6A loading gauge, and could therefore operate between Rail Central and virtually the entire national rail network where axle load and train length restrictions permit.

Rail Central offers comprehensive resilience and flexibility on the railway network having four separate (and fully electrified) main line access points onto two separate branches of the West Coast Mainline and which are inter-connected. This means that should NLL is closed for maintenance or incidents, Rail Central can continue to operate and access the fast lines of the WCML.

Rail Central provides dedicated facilities for locomotive and wagon maintenance and servicing

(2) *Direct connections to the strategic road network*

Rail Central offers direct access to the A43 dual-carriageway and lies in close proximity of the M1 which serves as the key north-south motorway link in the UK which forms a core part of the strategic highway network and provides access to a large proportion of the national population while the A43(T) offers alternative access to the M4 motorway.

(3) *Central location in the UK & Close to Market*

Northamptonshire is the UK's 'centre of gravity' for the distribution and logistics, with excellent access to national, regional and local markets. Notwithstanding its positon in the centre of the country, Rail Central is

located at the southern end of what is sometimes referred to as the 'golden triangle' for national distribution activity which is an area stretching along the M1 corridor from Milton Keynes to Leicester and across to Birmingham, with Northamptonshire at its heart.

This area is known for its high concentration of existing major logistics operators and it has been attractive due to the large conurbations it can serve – both on the doorstep (such as the East and West Midlands) but also further afield. This because around over 90% of the national population can be reached within a four hour drive. Within the Golden Triangle, East Midlands Airport is the UK's largest dedicated freight hub, with major international players such as DHL, TNT, Parcelforce and UPS based there.

Analysis undertaken at existing SRFI such as DIRFT indicates that the majority of business is related to warehouse facilities located either on-site or in relative close proximity to the terminal. Rail Central is also located close to a network of local conurbations and markets including Northampton, Wellingborough, and Kettering – which have high levels of occupier presence and expertise in the logistics sector. Rail Central will provide a further opportunity for these current occupiers to access rail as well as the new warehouse space proposed on site. Without such provision, existing logistic operations will continue to be dominated by road based distribution.

10.7 Placed within its locational context, therefore, Rail Central is one of the best sites within the East and West Midlands for a Rail Freight Interchange.

10.8 In light of the foregoing, it is clear that the Rail Central SRFI is compliant with the NPS in relation to the location criteria for SRFIs as set out in paragraphs 4.84 to 4.87 of the NPS.

Functional Criteria

10.9 NPS paragraphs 4.83, 4.88 and 4.89 sets out the functional criteria required for SRFIs to achieve and meet. In summary these paragraphs require the following:

(1) From the outset, a rail freight interchange (RFI) should be developed in a form that can accommodate both rail and non-rail activities.

(2) The initial stages of the development must provide an operational rail network connection and areas for intermodal handling.

(3) Applications for proposed SRFI should be capable of handling 4 trains per day and, where possible, be capable of increasing the number of trains handled.

(4) SRFIs should, wherever possible, have the capability to handle 775 metre trains with appropriate configured on-site infrastructure and layout. This should seek to minimise the need for on-site rail shunting and provide for

a configuration which, ideally, will allow main line access for trains from either direction.

10.10 The draft Rail Operations Report, Parameters Plan and the indicative phasing programme considers these functional elements in detail and when considered alongside the indicative phasing arrangements for the proposals and, on this basis, demonstrates the following

(1) Rail Served and Rail Connected

The entirety of the Main SRFI Site will be 'rail-served' with a significant element of the development plots (comprising around 2.2m sqft) having the ability to be 'rail-connected'.

At 291 ha, and offering significant warehouse development capacity of circa 7.4 million square feet, the Proposed Development offers a significant opportunity to achieve the critical mass required to facilitate a significant modal shift from road to rail in accordance with the overall strategic objectives of the NPS[57].

(2) Rail Infrastructure

The first phase of development would deliver sufficient rail infrastructure to allow for the intermodal terminal to connect to the NLL and achieve the minimum NPS requirement to provide capacity for up to four trains per day.

(3) Network Capacity

In terms of network capacity, analysis of the network capability for additional freight traffic has been undertaken on both the slow lines and fast lines by Network Rail and specialist timetable planners PRA. Please refer to the draft Rail Operations Report for further details.

On the slow lines south of Northampton, between 28 and 38 daytime paths for intermodal freight trains were identified in each direction, with additional capacity being available overnight. On the fast lines, between 14 and 19 paths were identified in each direction per day for express freight trains, with up to 50 paths for intermodal freight trains being available overnight. Whilst in combination the total number of paths available on fast and slow lines would be considerably less than this in practice, the joint analysis confirms the overall capability of the main line to cater for the initial requirements of the site, at 4 trains per day in and 4 trains per day out.

In the longer term, the development of the wider network, including phase 1 of HS2, will release capacity on the existing network to support further growth in freight services.

[57] See paragraph 2.37 of the NPS

Network Rail's long-range forecasts of market potential for intermodal services in the 2013 Freight Market Study have been produced using the GB Freight Model (GBFM). The model has been used to determine the quantum of rail freight traffic to and from Rail Central on a similar the basis, indicating the site floorspace could create the equivalent of 13 intermodal trainloads per day. In practice, this quantum of freight traffic would be distributed between intermodal services and other emerging service types (i.e. conventional wagon and express).

The Proposed Development will share the same rail (and highway) networks with other users and developments. In this regard it is apparent that the site is situated some 20 miles south of the established SRFI at DIRFT I and II (now being expanded into a third phase), with an additional SRFI scheme (Northampton Gateway) proposed east of the NLL, east of the Main SRFI Site. The three SRFI schemes would draw on the same main line capability of the Slow Lines, Rail Central being distinguished by having direct access into the WCML Fast Lines.

As explained above, the close or co-location of SRFI is not unique to this area, and elsewhere SRFI and RFI already operate alongside each other, and in some cases collaborate operationally despite being run by separate otherwise competing commercial undertakings. The draft Rail Operations Report documents numerous instances of SRFI and RFI successfully co-existing on the same sections of main line alongside other rail users. The NPS confirms the compelling need to create an expanded network of SRFI facilities, but does not set out requirements for the proximity or dispersal of these SRFI. The NPS notes that, in some cases, the development of SRFI may result in traffic moving from existing RFI as a consequence (paragraph 2.58). The overall objective is to significantly expand the level of rail-served distribution floorspace as a share of total distribution floorspace.

(4) Train Length Capacity

The draft Rail Operations Report confirms that from the outset, 775 metre long trains would be able to access the site from both directions.

Highways NSIP Criteria and Appraisal Requirements

10.11 Paragraph 4.5 to 4.6 of the NPS sets out the appraisal requirements in relation to road projects. The paragraphs require applications for road projects to be supported by a business case prepared in accordance with the Treasury Green Book principles and based on the Department of Transport, Transport Business Case guidance and WebTAG guidance.

10.12 The DCO application will comprise two NSIPs; one of which relates to a major highway scheme (J15A of the M1). In addition, associated development also contains a large number of other highway works. The two respective NSIPs are fully integrated and each will not proceed without the other. In essence, the highway proposals at J15A of the M1 are an NSIP simply as a consequence of exceeding the thresholds in the PA2008. As such, the Proposed Development is assessed as one single project.

10.13 It is therefore the Applicant's positon that paragraph 4.5 and 4.8 are not applicable in this instance. Our reading of this paragraph is that it serves to two purposes. One is that it is requiring justification of investment which requires public funding. This is not the case here where the highway NSIP is to be funded entirely by the Applicant. The second is that any business case prepared is to ensure that adverse impacts of the Proposed Development are set out and understood, and the necessary mitigation has been fully demonstrated. The practicality of the matter is that the draft TA provides a significant amount information to assess adverse impacts and has been prepared in accordance with WebTAG guidance in any event.

10.14 As a result, the highway works at J15A of the M1 are assessed as part of the SRFI application as a whole. An assessment of the highway impacts arising from the Proposed Development is set out in Section 12 of this Planning Statement and appraised against relevant NPS paragraphs 5.207-218).

11. Land Use

11.1 Land Use matters are covered by paragraphs 5.162 – 5.185 of the NPS and in this context, principally relate to matters such as minerals and agriculture. Other pertinent matters such as green infrastructure are covered elsewhere in this statement at section 16 (Biodiversity, Ecology and Nature Conservation).

Minerals

11.2 Paragraph 5.169 of the NPS states that 'applicants should safeguard any mineral resources on the proposed site as far as possible'.

11.3 To ensure a thorough approach has been taken in the preparation of the development proposals, the local policy position in respect of minerals has also been considered. This has confirmed that the northern half of the Rail Central SRFI site is within a minerals safeguarding area.

11.4 Policy 28 of the Northamptonshire Minerals and Waste Local Plan (MWLP) sets out requirements for development in Minerals Safeguarding Areas, applicable to applications under the Town and Country Planning Act 1990. It states that development of a significant nature in Minerals Safeguarding Areas will have to demonstrate compliance with one of a range of criteria including that the sterilisation of mineral resources of economic significance will not occur as a result of the development and that the development would not pose a serious hindrance to future extraction in the vicinity and there is an overriding need for the development.

11.5 Chapter 13 of the PEIR confirms that based upon professional judgement, the mineral resource will not be sterilised by the development, for the following reasons:

- Detailed analysis indicates that the sands and gravel deposits do not extend as far to the south into the site as indicated in the MWLP, thus reducing the area of mineral safeguarding;
- As confirmed by the Ground Conditions site investigation there are a number of former sand pits on site in the northwest, north and northeast (now backfilled as landfill). This indicates that the exploitable resource have been depleted, with little room for significant sand and gravel extraction activates to be undertaken;
- The piecemeal nature of the site ownership and shape of the numerous land holdings across the northern part of the site, means that any potential quarrying operation would be unlikely;
- The location of the remaining small pockets of sand and gravel, which are located close to the southern boundary of Milton Malsor, means that any potential quarrying operation would be unlikely. Furthermore, given the small scale of these sand and gravel pockets, their future extraction is unlikely to be commercially viable;

- The Proposed Development is limited in regards to its encroachment onto the Glaciofluvial Deposits in the north of the site; and

- As shown by the presence of M1: Milton Malsor allocated sand and gravel resource in the MLWP substantial (economically viable) deposits exist elsewhere in the county.

11.6 A small area at the north east of the Main SRFI Site is within the 300m buffer zone associated with a nearby allocated site for the Provision of Sand and Gravel. The allocation site, M1: Milton Malsor relates to a 1.2 million tonne resource at Maple Farm. It is identified for the provision of sand and gravel and the associated buffer zone (Policy 30) seeks to prevent land use conflict in close proximity to such allocated sites.

11.7 The identified extraction site is separated from the Main SRFI Site by existing residential development and major pre-existing infrastructure in the form of Collingtree Road and the NLL. Furthermore, there is no viable link between the Proposed Development and the identified extraction site; meaning, both operations would be able to co-exist without impacting upon each other. On this basis, there are no significant impacts upon the potential exploitation of the known mineral resource.

11.8 In accordance with the NPS, the Proposed Development has as far as possible sought to safeguard any existing mineral deposits within the proposed Order Limits. Notwithstanding the above, it is considered that there is an overriding need for the development as supported by the NPS by virtue of it being an NSIP, which seeks to deliver a network of SRFIs to ensure the government policy objective of shifting freight from road to rail is realised.

Agricultural Land

11.9 The Main SRFI Site extends to around 266ha of agricultural land, primarily in arable use. Agricultural land at the J15a works extends to around 32ha, also in arable use. Land associated with the minor highway works is in non-agricultural use.

11.10 The majority of the Proposed Development would take place on agricultural land, currently mainly in arable agricultural use. The impacts on agricultural businesses, soil resources and agricultural land have been assessed in the PEIR (Chapter 10).

11.11 The proposed Order Limits for the Main SRFI site include the following agricultural land-holdings:

Table 10.1: Farm Holdings within the Main SRFI Site

Farm name	Farm type	Tenure	Area farmed	Other enterprises
Arm Farm	Arable/Grass	Tenanted	65.8ha	
Manor Farm	Arable	Share farmed	32.4ha	
Hill Farm	Arable	Tenanted	197.9ha	
Lodge Farm	Mixed Arable /	Owner	85.0ha	

	Livestock	Occupied		
Rathvilly Farm	Grazing	Owner Occupied	6.3ha	Buildings let to marquee hire company
Courteenhall Estate	Arable	Owner Occupied	850.0ha	Large estate with a variety of other enterprises including wedding and events venue

11.12 The agricultural land at J15a that is proposed for ecological mitigation is owned by Messrs Robinson and Beesley, and is in arable cropping.

11.13 There are no farming interests affected by the minor highways works.

11.14 Table 10.14 of the PEIR (replicated as Table 10.2 below) states that overall, approximately 74% (203ha) of the agricultural land within the proposed Order Limits is moderate quality agricultural land in sub-grade 3b, with the remainder in sub-grade 3a (40ha), grade 2 (29ha) and grade 1 (2ha).

Table 10.2: Area of Agricultural Land Required within the proposed Order Limits

ALC Grade	Hectares	% of agricultural land
Grade 1	2	<1
Grade 2	29	11
Subgrade 3a	40	15
Subgrade 3b	203	74
Total agricultural land	274	100

11.15 Of the 274ha of agricultural land affected by the Proposed Development, 71ha is of best and most versatile (BMV) quality, predominantly of Grades 2 and 3a. The magnitude of change is assessed in the PEIR as high to a resource of moderate sensitivity. The effect on BMV agricultural land would be moderate adverse. In respect of farm holdings, it is anticipated that as a result of the Proposed Development, there would be a loss of over 20% of the farmable area of all the holdings affected, and the magnitude of this proposed change is considered to be moderate adverse.

11.16 The NPS recognises that it may not be possible to develop SRFIs without causing harm to the countryside and undeveloped greenfield land (NPS paragraph 5.163). However, the economic and other benefits of the best and most versatile agricultural land (i.e. grades 1, 2 and 3a) should be taken into account (NPS paragraph 5.176).

11.17 Measures to mitigate the impact on soil resources relate to recording (within a Soil Resources Management Plan) the existing soil resources of the Main SRFI Site and the land at the J15a works, and setting out measures to ensure that they are handled, stored and replaced according to good practice, are set out in the Defra Construction Code of Practice for the Sustainable Use of Soils. In this way, soils that are re-used on the Proposed Development will be used for their most suitable purposes in the detailed design and will be able to continue to fulfil their various ecosystem functions. The soil resource is dominated by the heavy clay loam and clay loams of the predominant soil type which is of high sensitivity.

11.18 The embedded mitigation relating to soil resources would enable the re-used soil resources to continue the various ecosystem functions on site within the soft landscaping, principally as a medium for producing biomass; for storing and cycling water and carbon; and for supporting habitats and biodiversity. As such, the permanent magnitude of impact on soils is assessed as medium as displaced soils would mostly fulfil the primary soil functions off-site or would have a reduced capacity to fulfil the primary functions on site.

11.19 Due to the nature of the Proposed Development and the specific locational and geographic requirements, it is quite possible that the development of SRFI will result in the loss of land predominantly in agricultural use. It is not possible to mitigate against the direct loss of agricultural land in the same location as the proposals. By virtue of the scale of the Proposed Development, there will ultimately be an impact on undeveloped land.

11.20 The ASA confirms that there are no brownfield alternatives to greenfield SRFI development and the Site's location and nature means that the permanent loss of a small portion of BMV land is inevitable. The significance of this is identified as being moderate on the economic impact on overall farm holdings. In respect of these moderate impacts, the significant benefits that would result for the Proposed Development outweigh the impacts of the loss of agricultural land in this context and in accordance with the NPS.

12. Impact on Transport Networks

12.1 The consideration and mitigation of transport impacts is an essential part of the Government's wider policy objectives for sustainable development.

12.2 The NPS advises that applicants should consult the relevant highway authority, and local planning authority, as appropriate, on the assessment of transport impacts, and should consider reasonable opportunities to support other transport modes in developing infrastructure (NPS paragraphs 5.204-5). The Applicant has agreed the assessment methodology with Highways England and Northampton County Council (NCC).

12.3 If a SRFI is likely to have significant transport impacts it should include a Transport Assessment, and any significant impacts should be described in the EIA. Where appropriate, the applicant should prepare a travel plan including management measures to mitigate transport impacts (NPS paragraphs 5.207-8, and paragraph 5.218).

12.4 Projects may give rise to impacts on the surrounding transport infrastructure including connecting transport networks. Paragraph 2.13 of the NPS confirms that the Secretary of State should ensure that the applicant has taken reasonable steps to mitigate impacts on surrounding transport infrastructure. Where the proposed mitigation measures are insufficient to reduce the impact on the transport infrastructure to acceptable levels, the Secretary of State should expect applicants to accept requirements and/or obligations for funding infrastructure and otherwise mitigating adverse impacts on transport networks (NPS paragraph 5.213). Paragraph 5.215 states that any mitigation should be proportionate and reasonable, focussed on promoting sustainable development.

12.5 Provided that the applicant is willing to commit to transport planning obligations and, to mitigate transport impacts, then the NPS confirms that: *'development consent should not be withheld'*. Appropriately limited weight should be applied to residual effects on the surrounding transport infrastructure (paragraph 5.214).

Highway Assessment

12.6 The Transport Assessment sets out a review of the existing site and surroundings. The review identifies that the area is well served with good transport links, including the M1 and M6 motorways approximately two kilometres to the north and 32 kilometres to the north west respectively, the WCML railway and the NLL railway.

12.7 The proposals are supported by a comprehensive public transport strategy including the provision of new bus stops on Northampton Road, a new bus interchange within the Main SRFI Site and additional bus services.

12.8 The Main SRFI Site is well connected to the strategic highway network, including the M1, A43, A5 and A45, as well as strategic local routes such as the A5123 and A5076. The connectivity to the major road network is a key requirement of the NPS for SRFI

sites and the Proposed Development site is therefore considered to be appropriately located in this regard.

12.9 The effects of the Proposed Development have been assessed in detail in the PEIR and the Transport Assessment covering a large study area using a variety of techniques. The methodology has been agreed with the relevant highway authorities and a robust assessment approach has been adopted. The applicant has developed a comprehensive package of measures including:

- Junction improvements;
- A sustainable transport strategy;
- Travel plan measures;
- Pedestrian and cycle improvements;
- Safety schemes; and
- Environmental enhancements.

12.10 Relevant local and national policy recognises that the Proposed Development presents the opportunity for sustainable economic growth whilst minimising the impact upon the local highway network. The development proposals and associated highway mitigation works have all been designed in accordance with the relevant highway design guidance. The development aligns with the thrust of national and local planning policy and guidance and will contribute to sustainable development and economic growth through the provision of a Strategic Rail Freight Interchange in a strategically suitable location.

12.11 Ongoing stakeholder engagement has resulted in:

- A number of comments in relation to highways and transportation from the SoS in January 2016, which are included and are addressed within the PEIR and the Transport Assessment.
- A number of comments made by local residents and other interested parties, which are included and addressed within the PEIR and the Transport Assessment.
- The agreement of a significant number of matters and documents by Highways England and NCC. These include matters in relation to site access, site layout, trip attraction, strategic modelling, junction assessments, travel planning, management and mitigation proposals.

Design Year Baseline Conditions

12.12 The results of the "Do Minimum" (DM) scenario modelling for the 2021 and 2031 design years without Rail Central indicate that the Northamptonshire highway network

is forecast to experience significant delays and congestion in future years taking account of the commitments and allocations in the JCS.

The Proposed Development

12.13 The following transport measures are proposed to accompany the SRFI to ensure that any opportunities for sustainable transport modes have been taken up, safe and suitable access can be achieved for all people, and improvements in the transport network to cost effectively limit the significant impacts of the development:

- Vehicular access to the site is proposed from the A43 via a new grade separated junction west of the development. The principal of this access strategy is agreed to be appropriate with Highways England and NCC;
- An estate spine road is proposed to serve the site from west to east from the access on the A43 through the development;
- A vehicular underpass is proposed on the route of the main estate road to allow it to pass beneath Northampton Road without impeding existing local traffic flow;
- Two emergency vehicle access points are provided into the site;
- During the construction phase, the existing left in, left out access on the A43 will be used to access the site, before this is switched to a new temporary left-in, left out access to the north on the A43;
- Pedestrian and cycle access to the site will be provided from Northampton Road via foot and cycleway connections both to the east and west of Northampton Road in the vicinity of the proposed underpass;
- It is proposed that a pedestrian underpass will be provided under the new access road, to allow pedestrians using the PROW to safely bypass this new infrastructure;
- Bus services can be provided via the emergency access point on the western side of Northampton Road which links directly to a proposed bus interchange including a bus stop, waiting area and turning facilities;
- Each of the warehouse units will be served with its own adjacent car and HGV parking provision which will be provided in accordance with Northamptonshire Parking Standards. In addition, a lorry park comprising is proposed to the north of the access road and adjacent to the site access;
- Off-site capacity improvements are proposed at 15 junctions;
- Road safety schemes are proposed;
- A continuous off-carriageway foot/cycleway is proposed to be provided along Northampton Road between the site and residential areas at the southern edge of Northampton;

- A Construction Traffic Management Plan and an Operational Traffic Management Plan to minimise their impact on the local highway network; and

- A public transport strategy and Framework Travel Plan have been prepared which include a range of initiatives and measures to encourage modes of travel other than single occupancy vehicles, such as improved bus services and pedestrian and cycle facilities.

Trip Attraction

12.14 The development person trip attraction is agreed with Highways England and NCC and utilises person trip generation from similar SRFI facilities, specifically the East Midlands Gateway Strategic Rail Freight Interchange. Highways England and NCC agree that the trip generation is robust and a worst case assessment.

12.15 The peak hours for assessing the impact of the development were agreed with Highways England and NCC as weekday 0800-0900 and 1700-1800 as that is when the existing highway network is busiest.

12.16 MDS Transmodal prepared HGV traffic forecasts for the proposed SRFI on the basis that the proposed level of warehousing floorspace, which indicates that the intermodal terminal will be capable of handling 775 metre trailing-length trains. The overall vehicle trip attraction equates to 929 two-way movements during the AM peak and 1,236 two-way movements during the PM peak.

Design Year 'With Development' Conditions

12.17 The "Do Something 2" scenario (DS2) is the DM baseline with the full build out of the Proposed Development plus the proposed mitigation scheme for M1 J15A. The DS2 results demonstrated that the proposed improvements at M1 J15A provide a significant benefit to the operation of the wider highway network, with trips returning to major routes and away from inappropriate minor routes.

Junction Capacity Assessments

12.18 The junction capacity assessments show that the residual traffic impacts of the Proposed Development have been mitigated and that the proposed mitigation provides in some cases wider benefits and benefits to existing road users. It is intended that mitigation will be phased alongside the build out of the Proposed Development. The details of this phasing will be finalised for the DCO submission.

Cumulative Assessment

12.19 The capacity assessments carried out demonstrated that in the vast majority of cases the Rail Central highway mitigation proposals mitigate against the impacts of both the Rail Central and the Northampton Gateway developments. However, further work will be carried out in advance of the DCO submission to determine whether further mitigation is required in relation to M1 J15 (which is mitigated for 3 of 4 scenarios); and for M1 J15A and the A45 Barnes Meadow Interchange where the cumulative impact is not fully mitigated.

Conclusions (Transport and Highways)

12.20 Projects may give rise to impacts on the surrounding transport infrastructure including connecting transport networks.

12.21 Working with the relevant highway authority and local planning authority has been a key element of the project design and assessment. The Applicant has agreed the assessment methodology with Highways England and Northampton County Council, and an appropriate Transport Assessment and assessment of traffic management has been undertaken, providing appropriate management measures to mitigate transport impacts in accordance with the NPS.

12.22 Paragraph 2.13 of the NPS confirms that the SoS should ensure that the applicant has taken reasonable steps to mitigate impacts on surrounding transport infrastructure. Paragraph 5.215 states that any mitigation should be proportionate and reasonable, focussed on promoting sustainable development.

12.23 The PEIR and the Transport Assessment identify that the residual effects for all assessed impacts are either not significant or are beneficial, with the exception of J15a in relation to operational traffic flows, where the significance of effect has reduced to moderate adverse as a result of the implementation of mitigation in the form of an Operational Traffic Management Plan, Framework Travel Plan, Public Transport Strategy and Pedestrian and Cycling Infrastructure. However, the proposed improvements at J15a provide a benefit to the operation of the wider highway network, with trips returning to major routes and away from inappropriate minor routes.

12.24 The package of measures proposed within the Parameters Plans and assessed within the PEIR and the Transport Assessment will provide for development that is in accordance with the NPS. Accordingly, and in line with NPS paragraph 5.214, development consent should not be withheld.

12.25 It is concluded that the methods and evidence submitted and assessed in respect of the current and future highway traffic situation in the area, the likely impacts of constructing the Rail Central SRFI, and the package of highway improvements, are in accordance with NPS paragraphs 5.201 – 5.218.

12.26 Whilst some further work is required on proposed mitigation phasing and assessment, overall, the junction capacity assessments show that the residual traffic impacts of the Proposed Development have been mitigated. The proposed mitigation provides, in some cases, wider benefits and benefits to existing road users. The benefits to the existing highways network would therefore need to be accorded significant weight.

13. Landscape and Visual Impacts

13.1 The NPS requires that where development is subject to EIA, the Applicant should undertake an assessment of any likely significant landscape and visual impacts (NPS paragraph 5.144).

13.2 The Landscape and Visual chapter of the PEIR (Chapter 17) contains the landscape and visual assessment, based upon current Landscape Institute and the Institute of Environmental Management and Assessment Guidelines (amongst other considerations).

13.3 The landscape assessment has considered the effects of the Proposed Development on the landscape as an environmental resource in its own right, and the visual assessment has considered the effect of visual change on people's views and visual amenity.

13.4 Landscape and visual effects have been considered for:

- the construction phase;
- operational phase at Year 1 Winter;
- operational phase at Years 7 and 15 during Summer (to take account of the residual effects once embedded mitigation has developed and reached a level of maturity); and,
- decommissioning phase of the Proposed Development.

13.5 These factors have been considered together with consideration of the:

- night time visual effects of the Main SRFI Site; and
- intra and inter project cumulative effects.

13.6 The landscape and visual assessments have been undertaken in parallel, and have been informed by a combination of desk and site-based appraisal techniques and professional judgement.

13.7 The proposed SRFI would entail open farmland being replaced with new built development and associated infrastructure, and an altered form with new landscaping. The buildings would be sited on development plateaus that would be created as a result of cut and fill operations.

13.8 The height of the tallest of the proposed buildings on the Main SRFI site would be up to 18.5 metres to the ridge, as indicated on the Parameters Plan and as summarised in Chapter 5 of the PEIR. There would be extensive landscape, screening and open space created around the main development area.

13.9 The draft DAS details the design considerations and the various iterations of the masterplan for the scheme as it evolved. The final designs for the proposed buildings

on the SRFI site have not been provided, but the draft DCO would encompass their detailed design including building materials and layout.

13.10 The draft DAS outlines the underlying design principles for the buildings, which would be designed to high environmental and quality standards with elevational treatment designed to minimise the visual impact of the buildings towards sensitive views. Although the choice of building materials has not been specified, cladding materials with low reflective properties, avoiding bright colours, would be appropriate.

13.11 Significant landscaping, in the form of engineered screening bunds and landscape planting, is proposed as part of the Proposed Development. It is accepted that to provide the degree of screening that is envisaged, it is vital that the proposed landscaping, particularly on the mounding, is properly maintained to ensure it becomes established and thrives.

13.12 To illustrate the effectiveness of the embedded mitigation verifiable rendered photomontage images for ten of the representative viewpoint locations have been prepared, to represent the residual visual effects once planting has established in the Summer of Year 7 following the completion of the development; and once planting proposals have reached a reasonable level of maturity, which is taken as the Summer of Year 15 following completion of development. These photomontage images do not include additional (adaptive) mitigation.

13.13 The establishment and future success of the external landscaping is largely dependent on the standard and frequency of the subsequent maintenance and management it receives. A 15-year Maintenance and Management Plan will be finalised, that outlines the proposed establishment monitoring, maintenance and management programme.

13.14 Additional adaptive measures over and above the proposed embedded mitigation which may assist with the screening and integration of the Proposed Development into the landscape will be considered at the detailed design stage and agreed with SNC. Such additional measures to be considered may include:

- Site design and layout, position and orientation of buildings and other infrastructure;
- Finished ground levels and heights of buildings and other infrastructure; and
- Material finishes and colour scheme for buildings and other infrastructure.
- Other additional mitigation measures to be considered at detailed design stage may include:
- Planting strategic groups of larger sized trees (e.g. semi mature, extra heavy standard, and large feathered trees) for instant visual impact;
- Planting strategic groups of coniferous and evergreen tree and shrub species for year round screening from sensitive views;
- Planting of new native species hedgerows for wildlife and habitat connectivity;

- Provision of oversized culverts under road and rail at key points to connect up key landscape corridors and wildlife hedges across the site;
- Provision of ditches running adjacent to hedgerows to replicate the traditional field edge;
- Infill planting and restoration of retained existing hedgerows for wildlife and habitat connectivity and visual screening;
- Management of the existing on-site hedgerows that are to be retained (e.g. hedgerows along Northampton / Towcester road) and offsite hedgerows (subject to third party agreements) trim sides of hedges only to encourage top growth and an increased hedgerow height, maintain at taller height;
- Offsite provision of planting within gardens or at boundaries of affected residential properties (subject to third party agreements);
- Species selection and habitat creation will seek to provide a net gain in biodiversity across the site;
- Provision of woodland, calcareous grassland and neutral grassland 'reservoirs' as defined in Northamptonshire GI Plan;
- Creation of dark zones along canal side boundary; and
- Collection of cuttings / seeds from TPO and Veteran Trees identified for removal in order to propagate and grow planting stock of local provenance for use in mitigation planting.

13.15 No significant landscape or visual effects are anticipated for the Minor Highways Works and therefore no additional mitigation over and above the embedded mitigation is proposed.

Construction

Construction – Main SRFI Site

13.16 The landscape effects which are associated specifically with the construction phase of the Main SRFI Site relate to the introduction of construction operations, related structures, equipment, landform alterations and stockpiling of materials for a temporary period. The existing site has a network of hedgerows and small amount of tree cover related to the existing field boundaries. So, the alteration in land cover due to the construction of the Main SRFI Site relates to a loss of arable land as a component of the landscape character and a direct loss of other landscape elements such as hedgerows, hedgerow trees including some notable and veteran trees.

13.17 The Main SRFI Site is not designated and demonstrates no greater than local level of value, therefore the Main SRFI Site is considered to be Low value.

13.18 The construction operations will be highly prominent in the landscape of the study area given the relative complexity of their appearance. Construction operations will also be

in a state of change as construction progresses, and operations such as the bulk earthworks, together with the loss of agricultural fields, field boundaries and trees, would result in a substantial alteration to the areas key characteristics. Therefore the effects of construction are considered to result in a High degree of change.

13.19 The construction operations will result in extensive change across the Main SRFI Site for up to ten years. Therefore the extent and duration of change to the local landscape character of the Main SRFI Site is considered to be Extensive and Long term. The changes would be Partially Reversible as the construction compounds, construction access tracks and roads, plant and machinery, buildings and bunds could be removed and land cover, field pattern and field boundaries re-established however the loss of mature trees could not be reversed in the short or medium term.

13.20 Therefore it is considered that the construction of the Main SRFI Site will give rise to a Major Adverse level of effect to local landscape character.

13.21 Following the completion of construction operations, the following reinstatement will occur:

- The removal of the construction compounds; and
- The removal of all construction vehicles, plant and equipment.

13.22 The main visual effects which are associated specifically with the construction phase of the Main SRFI Site relate to the introduction of construction operations, related structures, equipment, earthworks and stockpiled material for a temporary period. The existing site has a network of hedgerows and a small amount of tree cover related to the existing field boundaries. So, the visual effects during construction relate to the introduction of new features for a temporary period and a direct loss of other landscape elements such as the hedgerows.

13.23 Specific aspects of the SRFI construction operations which have the potential to give rise to visual effects for a temporary period are:

- The presence of a construction compounds;
- The use of tall construction equipment, such as cranes;
- The storage of materials; and
- The movement of construction vehicles within the site and along the new temporary and permanent access tracks.

13.24 For the purposes of this visual assessment, the visibility of three stages of construction have been described and assessed. The three stages of construction are:

- Construction of the A43 grade separated junction, Northampton Road underpass and internal access roads;
- Construction of the landscape screening mounds; and

- Construction of the warehouses and gantry cranes.

13.25 A detailed viewpoint assessment has been undertaken for the representative viewpoints.

13.26 The assessment shows significant effects in relation to the following receptors:

- VP1 – Barn Lane – Residents (R8) &PRoW – Major Adverse
- VP2 – PRoW KX13 – Major Adverse
- VP3 – PRoW RD6 – Major Adverse
- VP4 – PRoW RD1 – Major Adverse
- VP5 – Railway Cottages, Northampton Road – Residents (R8) – Major Adverse & Road Users TRd – Moderate Adverse
- VP6 – PRoW RD12 – Major Adverse
- VP7 – Blisworth Arm – Residents (R21) & PRoW GUCW2 – Major Adverse
- VP13 – Courteenhall Road – Residents (R6) – Moderate Adverse
- VP14 – Hill Farm, Gayton Road – Residents (R5) & PRoW MSW – Moderate Adverse
- VP16 – PRoW KX5 – Moderate Adverse
- VP17 – PRoW KX7 & KX8 – Major Adverse
- VP18 – Milton Malsor – Residents (R11) & PRoW KX9 – Major Adverse.

Construction – Highways works

13.27 The landscape effects which are associated specifically with the construction phase of the J15a Works relate to the introduction of construction operations, related structures, equipment, landform alterations and stockpiling of materials for a temporary period. The existing site has a network of linear tree and shrub belts along the road corridors. There is little alteration in land cover due to the construction of the J15a Works as it relates to the upgrading, widening and / or realignment of existing road lines and bridges, and the introduction of a new link road and bridge structure south of the M1. Impacts relate more to the direct loss of other landscape elements primarily the linear tree and shrub belts.

13.28 The construction operations will be prominent in close proximity. However works to the road network are relatively commonplace and would be experienced in the context of ongoing maintenance to the highway network. Construction operations will also be in a state of change as construction progresses, and operations such as the bulk earthworks, together with the loss of linear groups of shrubs and trees, would result in some a very minor alteration to some of the local landscapes key

characteristics to the south of the M1 in particular. Therefore the effects of construction are considered to result in a Low degree of change over a very limited geographical extent. The construction operations will result in a loss of vegetation for a period of years. Therefore the duration of change is considered to be Medium term. The changes would be Partially Reversible as the construction compounds, construction access tracks and roads, plant and machinery, buildings and embankments could be removed and land cover, field pattern and field boundaries re-established , the loss of mature trees may be reversed in the medium to long term.

13.29 It is considered that the construction of the J15a Site will give rise to a Minor Adverse level of effect to local landscape character.

13.30 Following the completion of construction operations, the following reinstatement will occur:

- The removal of the construction compounds;
- The removal of all construction vehicles, plant and equipment; and
- Reinstatement of grass verges and replacement planting.

13.31 In terms of the J.15a Works and visual effects, significant construction phase visual effects would be limited to the visual receptors in close proximity to the J15A Works site, to users of the Grand Union Canal recreational route, the Grand Union Canal Walk), and ProW KX2. The Grand Union Canal passes through the middle of the J15a Works site and unobstructed views of the construction of the southern link road and other modifications to the north would be available to users of the canal and walk in close proximity to the works. Similarly ProW KX2 passes through an area defined for use as a construction compound, and unobstructed views may be obtained to users.

13.32 In relation to the Minor Highways Works, significant effects are only likely to be experienced at the works at Junction 6 A5076 / Hunsbury Hill Road Roundabout.

Operation

Operation - Main SRFI Site

13.33 The following section sets out the assessment of the residual landscape and visual effects during operation at Years 7 and Year 15 to take account of the effectiveness of the proposed embedded together with additional identified (adaptive) mitigation measures.

Residual Landscape Effects

13.34 During operation, the effects of the Proposed Development at the Main SRFI Site (including embedded mitigation) to local landscape character have been assessed as Moderate Adverse and Significant. However, the introduction of additional mitigation measures may help to further limit the prominence and influence of the Main SRFI Site and provide further compensation for landscape features and habitats lost or modified during construction.

13.35 Whist the Proposed Development at the Main SRFI site would remain a reasonably conspicuous element in the local landscape and would result in some alteration to key characteristics, after 7 years it is considered that the embedded and additional mitigation will begin to mature and will soften the appearance of the Proposed Development and help to further screen and integrate it with the receiving landscape. After 15 years of operation the embedded and additional mitigation will have established and reached a reasonable level of growth and maturity, and planting on the screening bunds would further soften, screen and filter views of the Proposed Development at the Main SRFI Site further reducing its prominence in the local landscape and provide some beneficial effects for both the landscape and ecological character of the site.

13.36 It is considered that the residual landscape effects to the landscape character of the Main SRFI Site at year 15 would be a Moderate Beneficial effect.

Residual Visual Effects – Residential Receptors

13.37 Highly Significant or Significant visual effects will be limited to residents in individual properties in close proximity to the Main SRFI Site or in more distant locations where views may be gained from elevated locations overlooking the site.

13.38 The Applicant is providing a fund available to the local residents affected by the Proposed Development, to enable the purchase and planting of trees, or management of existing hedgerows at affected properties. If this fund is taken up by local residents, the introduction of this additional mitigation would have a significant benefit and would reduce adverse effects at these affected properties to not significant at Year 15. However, it is acknowledged that take up of this fund and the implementation of additional mitigation measures cannot be guaranteed or relied upon in the assessment, and therefore the assessment of worst case residual visual effects remains as stated above.

13.39 Should affected residents take up the fund, then the effect on those residents previously assessed as being highly significant or significant would be reduced to negligible by year 15.

Residual Visual Effects - Recreational Routes and Public Rights of Way

13.40 Highly Significant visual effects will be limited to users of Recreational Routes and PRoW in close proximity to the site and from elevated ground overlooking the Main SRFI Site, where unobstructed prolonged views are available from a large proportion of the route.

13.41 Highly Significant and Significant visual effects cannot be fully mitigated for KX13, RD1 & RD22 due to the elevated positions they occupy at close proximity to the site, and to the open nature of the fields they cross allowing prolonged, open, unobstructed views of the Proposed Development at the Main SRFI site. Therefore Highly Significant residual visual effects will occur to users of the PRoW.

13.42 For KX5, Major Adverse / Highly Significant visual effects are anticipated at year one of operation. Such effects are anticipated to reduce due to the effectiveness of the

proposed embedded mitigation including screen bunding and planting by Year 15, however Significant residual visual effects are anticipated.

13.43 For RD3, RD6 & KZ14 Major Adverse / Highly Significant residual visual effects are anticipated. For KX10 Moderate Adverse / Significant residual visual effects are anticipated.

13.44 However, the introduction of additional mitigation measures may reduce the visual effects. Specifically in relation to KX5: by third party agreement to management of the existing intervening hedgerow field boundaries adjacent to Gayton Road; For RD3, RD6 & KZ14: by third party agreement to management of the existing intervening hedgerow field boundaries adjacent to Courteenhall Road and field boundaries to the south of the road; and for KX10 by third party agreement to management of the existing intervening hedgerow field boundaries adjacent to Collingtree Road and field boundaries to the south of the road. Hedgerows could be managed to grow out and tall, or targeted offsite planting adjacent to these field boundaries including the introduction of groups of large size feathered and semi mature deciduous trees may result in a Medium degree of change by year 7, which is Significant, and a Low degree of change by Year 15, which is Not Significant. However it is acknowledged that agreement with third parties to such measures cannot be guaranteed and therefore the implementation of the additional mitigation measures cannot be guaranteed or relied upon in the assessment, and therefore the assessment of worst case residual visual effects remains as stated above.

13.45 For KX16 and RD12, which are realigned and routed though the proposed Landscaped Open Space within the Main SRFI Site, Major Adverse / Highly Significant visual effects are anticipated at year one of operation. Such effects are anticipated to reduce to Significant by Year 15 due to the effectiveness of the proposed embedded mitigation including screen bunding and planting. However, the introduction of additional mitigation measures as set out in the Mitigation section above may reduce the visual effects. Specifically in relation to KX16 and RD12 the targeted introduction of groups of large size feathered and semi mature deciduous and coniferous trees and other evergreen species may result in a Medium degree of change by year 7, which Significant, and a Medium to Low degree of change by Year 15.

Residual Visual Effects – Road Users

13.46 No significant residual visual effects are anticipated for road users due to the effectiveness of the embedded mitigation measures.

Operation – highways works

13.47 In terms of the J15a Works Operational Landscape Effects, it is considered that the residual effects to the landscape character of the J15a Works at year 15 would be Negligible.

13.48 In terms of the J15a Work Operational Visual Effects at approximately year 15 of operation the proposed structural planting is expected to have reached a level of maturity such that they will provide mitigation of operational visual effects of the J15a

Site with views of moving traffic being very minor or barely discernible, resulting in a Minor Adverse to Negligible level of residual visual effects.

13.49 Regarding the Minor highways Works Operational Landscape and Visual Effects, by year 7 replacement mitigation tree planting will be well developed and by year 15 fully established, replacing the vegetation lost to construction and visual screening. Therefore it is considered that the proposed works will give rise to a Negligible level of residual landscape and visual effect.

Decommissioning

13.50 Further studies and assessment work would be required in order to determine the likely decommissioning phase effects of the Proposed Development, and assessment (as far as can reasonably be undertaken at this stage) will be set out in the DCO submission. However, a preliminary assessment of the decommissioning phase landscape and visual effects is provided.

13.51 Decommissioning landscape and visual effects will be similar to those identified for the construction phase, though the effects will be largely determined by the nature of the demolition and restoration proposals, the intended future land use, and the degree of removal of landscape and ecological features introduced as part of the Proposed Development including any screen bunding and planting.

13.52 There is potential for Significant effects to the landscape character of the Proposed Development site due to the change from operational SRFI to restored or partially restored land. Dependent upon the final restoration design, land use and land cover, it might be considered that the decommissioning effects to the landscape character of the site are Beneficial.

13.53 No significant effects would be anticipated to National or County Landscape Character Areas.

13.54 There is potential for Significant visual effects due to decommissioning activities to sensitive visual receptors including residential properties and users of the PRoW network in close proximity to the Main SRFI Site or where views may be gained from elevated positions. Views of demolition activities within the Main SRFI site are likely to be screened from many locations by the screen bunds and planting introduced as part of the Proposed Development, though there may be views of the removal of tall structures such as gantry cranes and the upper sections of warehousing units, and the presence of tall demolition equipment such as cranes.

Cumulative

13.55 In summary, of the cumulative developments identified for assessment as part of the LVIA work, with the exception of the Northern Gateway Strategic Rail Freight Interchange located directly adjacent to the eastern boundary of the Main SRFI Site, all other shortlisted cumulative developments consist of residential urban extension projects.

Northampton Gateway Cumulative Landscape Effects

13.56 Considering the potential for cumulative landscape effects during the construction phase, the maximum adverse scenario that the two developments are constructed simultaneously will give rise to some adverse effects on landscape character within the study area. The effects would be at their greatest in the areas in-between Collingtree and Milton Malsor. The Proposed Development and the Northampton Gateway are located in close proximity to each other. The change from operational agricultural land brought about by changes to land cover and land use and the loss of landscape features such as hedgerows and trees, together with the presence of construction machinery including the use of tall construction equipment and activities such as the movement of materials, would be expected to give rise to a Major Adverse level of cumulative effect on the local landscape.

13.57 Considering the potential for cumulative landscape effects during the operational phase, a similar principle identified in the construction phase applies in that the addition of two large development schemes to the baseline landscape character will give rise to adverse effects to local landscape character. The combination of the Proposed Development and the Northampton Gateway would be likely to give rise to adverse cumulative landscape effects at year 1 of operation, and prior to the establishment of mitigation of screen bunding and planting. After 7 years it is considered that the embedded mitigation of primary green infrastructure, including screening bunds, woodland and hedgerow planting proposed by both schemes will begin to mature and will soften the appearance of the developments and help to screen and integrate them with the receiving landscape. After 15 years of operation the embedded mitigation of primary green infrastructure will have established and reached a reasonable level of growth and maturity, and planting on proposed screening bunds would further soften, screen and filter views of each site reducing their prominence in the local landscape. The embedded mitigation of primary green infrastructure would replace and compensate for the loss of existing trees and hedgerows, and would contribute to minimising the effects due to the loss of veteran trees. Therefore after 15 years it is considered that the combined effects of both developments would result in a Moderate Adverse level of cumulative effect to local landscape character, which is Significant.

Northampton Gateway Cumulative Visual Effects

13.58 Considering the potential for cumulative visual effects during the construction and operational phases, there is potential for very limited and localised cumulative visual effects. Of the twenty-three representative viewpoints assessed in Appendix 17.4 of the PEIR, Highly Significant visual effects have been identified for one viewpoint, Viewpoint 3. Viewpoint 3 is representative of views to users of PRoW's RD3, RD6, Kz14 and RD22 located to the East of Blisworth. From this elevated location overlooking the Main SRFI Site and the Northern Gateway Site, successive as walkers travel along the PRoW north-eastwards and, in addition combined views of both developments may be gained for certain vantage pints pots along these PRoW routes. Views of the Northampton Gateway intermodal area, gantry cranes and warehouses over the landscape screening bunds would be seen in combination with views of the Main SRFI Site. Visual separation between the Main SRFI Site and Grange Park may be lost due to the introduction of Northampton Gateway as the upper portions of warehousing and roofs may potentially appear to visually extend to meet with the warehousing at

Grange Park in the north east. Therefore from a limited extent of the PRoW RD3, RD6, KZ14 and RD22 it is considered that there will be a Major adverse level of cumulative visual effect during the operational phase.

13.59 Considering the potential for cumulative visual effects during the construction and operational phases, there is potential for very limited and localised significant cumulative visual effects are limited to users of PRoW in a localised area on elevated land to the east of Blisworth. No significant visual effects are anticipated for residential receptors.

Other Projects Cumulative Landscape Effects

13.60 Considering the potential for cumulative landscape effects during the construction phase, the maximum adverse scenario that all identified developments are constructed simultaneously will give rise to some adverse effects on landscape character within the study area. These effects would be at their greatest in the areas in-between Collingtree and Milton Malsor. The Proposed Development and the residential urban extension around Collingtree Park Golf Club development are located in close proximity to each other.

13.61 Considering the potential for cumulative landscape effects during the operational phase, a similar principle identified in the construction phase applies in that the addition of two large development schemes to the baseline landscape character. The combination of the Proposed Development and the residential urban extension around Collingtree Park Golf Club development would increase the built form in that locality. The SRFI on its own would not join the built form of Collingtree and Milton Malsor and would leave an area of open landscape to the south of the M1. This would be expected to give rise to a Minor Adverse level of cumulative effect on the landscape which is Not Significant.

Other Projects Cumulative Visual Effects

13.62 Further studies and assessment work to determine the cumulative landscape and visual effects of the Proposed Development with other projects is ongoing, and the results will be set out in the final DCO submission.

13.63 Of the twenty-three representative viewpoints assessed in Appendix 17.4 of the PEIR, no significant cumulative visual effects with Other Projects have been identified.

13.64 For representative viewpoints 3, 4, 8, 10, 11, 12, 13, 14, 15, 16, 18 & 19 a Minor Adverse or Negligible level of cumulative visual effect has been identified which is Not significant.

13.65 For the remaining representative viewpoints no cumulative visual effects with Other Projects are anticipated.

Monitoring

13.66 The establishment and future success of the external landscaping is largely dependent on the standard and frequency of the subsequent maintenance and management it

receives. A 15 Year Soft Landscape Maintenance, Ecological Enhancement and Overall Management Plan (1627-15-RP02) has been prepared which outlines the proposed establishment monitoring, maintenance and management programme. At the end of this initial 15 year period a full review of the management approach will be undertaken. Revisions and amendments will be included to form the basis of an amended plan to ensure that the landscape continues to develop its ecological potential and to maintain the benefits of the enhancements provided.

Lighting

13.67 Chapter 21 of the PEIR contains an assessment of lighting associated with the Proposed Development.

13.68 Good lighting is critical for the safe and secure functioning of businesses where people work at night to service distribution networks. As these businesses could operate over 24-hour periods, good quality night-time illumination is a vital requirement to ensure worker safety and business efficiency. However, the lighting approach for such ventures must be mindful of being a 'good neighbour' especially when these are in rural or semi-rural environments.

13.69 The lighting assessment investigates the possible lighting design impact at night between these two equally important night time factors: operational safety and security; and, minimising light pollution.

13.70 A baseline survey of the existing lit nightscape has been carried out in order to establish the existing, lit, baseline condition. Then, given the fact that the exact design details of the site are not know at this stage, an 'Operational Lighting Parameters' lighting scheme has been generated using a 'worst case scenario' approach. From this generic scheme an 'Illumination Impact Profile' could then be generated that shows the potential impact on a range of ecological, heritage and human sensitive receptors. The magnitudes have been identified, enabling mitigation measures to be set out so that, when a lighting design scheme is undertaken at the detailed design stage, any residual impact from the lit site can be minimised.

13.71 A management plan that includes for periodic monitoring of lighting and that makes provision for any necessary remedial works, and that also deals with the control of lighting associated with night-time construction activities, is an appropriate means of mitigation.

13.72 The draft DCO will require that details of the permanent lighting for each phase of the development are submitted for the approval of the LPA, or relevant highway authority for the highway works, prior to the commencement of development. In addition to the conclusions drawn in the PEIR, it is considered that this requirement will provide safeguards to ensure the appropriate lighting scheme is provided to avoid unnecessary adverse impacts on nearby residents.

13.73 With mitigation, there are no significant effects in relation to lighting.

Conclusions (Landscape and Visual)

13.74 The NPS (paragraph 4.84) acknowledges that due to their particular locational requirements, countryside locations may be required for SRFIs. Paragraph 5.149 of the NPS makes clear that *"projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints, the aim should be to avoid or minimise harm to the landscape, providing reasonable mitigation where possible and appropriate."*

13.75 The consideration of the proposals within the context of the NPS is whether harm to the landscape has been avoided or minimised, with reasonable mitigation provided.

13.76 As clearly demonstrated in the PEIR, the development of the proposals has been informed by a detailed assessment of the existing landscape to understand the nature of the effect likely to occur as a result of the Proposed Development. The assessment has considered effects on the landscape at a range of scales and visual effects from the perspective of residents, pedestrians and road users. A series of viewpoints have been agreed to inform the assessment process.

13.77 This assessment has informed the embedded mitigation proposals which have evolved through the design process for the development, such as the proposed bunds to seek to avoid harm to the landscape. A suite of mitigation measures are proposed to further minimise any potential harm to the landscape. Where these mitigation measures are subject to take up from local residents, such as the fund to enable purchase of trees, the assessment has been undertaken on a worst case scenario.

13.78 Although the existing character and appearance of the SRFI site will be clearly altered, the assessment shows that, overall, the wider landscape impacts would not be significantly detrimental. The surrounding area already contains significant elements of built development, and the design of the scheme parameters, including proposed earthworks and other landscaping, provide sufficient mitigation. Indeed a moderate beneficial residual impact is concluded in respect of the landscape character of the SRFI site. The assessment also demonstrates that overall the impact on the assessed views is also not significantly detrimental.

13.79 In accordance with NPS paragraph 5.149 the proposals have been designed carefully taking account of their potential impact on the landscape, which has been informed by a detailed assessment of the existing landscape and visual baseline. This assessment has led to the inclusion of a suite of mitigation measures, including embedded mitigation, to seek to avoid or minimise harm to the landscape. The draft DAS demonstrates that the design considerations have been taken into account during the evolution of the scheme, in compliance with paragraphs 4.30 and 4.35 of the NPS. It is concluded that the landscape and visual impacts, including lighting, of the Proposed Development are acceptable and compliant with paragraphs 5.144 and 5.146 of the NPS in terms of the methodology adopted and paragraphs 5.160 and 5.161 of the NPS in terms of the mitigation proposed.

14. Historic Environment

14.1 The NPS acknowledges that the construction and operation of national networks infrastructure has the potential to result in adverse impacts on the historic environment. Those elements of the historic environment that hold value because of their historic, archaeological, architectural or artistic interest are termed 'heritage assets' (NPS paragraph 5.122).

14.2 Categories of designated heritage assets include, for example, Schedule Monuments, listed buildings, registered parks and gardens, registered battlefields, and conservation areas. Non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to Scheduled Monuments, should be considered subject to the policies for designated heritage assets. The NPS acknowledges that the absence of designation for such heritage assets does not indicate lower significance. Impacts on other non-designated heritage assets are also relevant where there is clear evidence that the assets have a significance that merit consideration in that process, even though those assets are of lesser value than designated heritage assets.

14.3 In terms of the decision making process, there should be a presumption in favour of conservation, and the more significant the asset, the greater that presumption should be. The decision maker should weigh any harmful impacts against the public benefit of the development. However, where there is a high probability that a development site may have undiscovered heritage assets with archaeological interest, there should be a requirement that appropriate procedures are in place for the identification and treatment of such assets discovered during construction.

14.4 Above and below ground assets have been assessed, and form two separate chapters in the PEIR. The assessments have, however, been undertaken in conjunction with each other to ensure a robust approach. For the purposes of this Planning Statement, Built Heritage Assets are considered first, followed by Archaeology.

Built Heritage Assets

14.5 Chapter 12 of the PEIR assesses above-ground built heritage assets. The chapter and supporting Heritage Assessment have assessed the likely significant environmental effects of the Proposed Development on the above ground historic built environment of the proposed Order Limits and the surrounding area.

14.6 In defining the appropriate heritage Study Areas, best practice guidance, professional experience and judgement, and an assessment of the potential effects of the Proposed Development on Built Heritage has been applied. It has also been informed by the extent of consultation undertaken and received to date.

14.7 An assessment of the significance of all designated and non-designated built heritage assets within a 2km radius Study Area for the Main SRFI Site has been undertaken, including an assessment of the contribution made by their setting. For the J15a Works and the other highway works, a 250m Study Area has been used. The heritage assets and the rationale for the Study Areas are out within the Heritage Assessment and have

been undertaken in accordance with best practice guidance and advice contained within the National Planning Policy Framework (NPPF) 2012, Planning Practice Guidance (PPG) 2014, Design Manual for Roads and Bridges (DMRB) 2015 and Historic England guidance, 2017.

14.8 There are no designated heritage assets within the proposed Order Limits of the Main SRFI Site. Within the Main SRFI Site Study Area, there are 146 Listed Buildings, 8 Conservation Area, 1 Registered Park and Garden and 2 Scheduled Monuments. There are no World Heritage Sites or Registered Battlefields within this Study Area. There are 17 buildings on the Historic Environment Record (HER) within this Study Area.

14.9 There are 4 designated heritage assets full or partially within the J15a Works area and Minor Highway Works proposed Order Limits, consisting of the Grand Union Canal Conservation Area, two grade II listed locks (No's 11 and 13) and a grade II listed Drawbridge (to Lock No 13) on the Northampton Arm of the Grand Union Canal. Within the Study Area, there are approximately 23 Listed Buildings, 1 Conservation Area and 1 Registered Battlefield. There are no World Heritage Sites, Registered Parks and Gardens or buildings on the Historic Environment Record (HER) within the J15a works or Minor Highway Works Study Area.

14.10 The above designated and non-designated heritage assets were identified and confirmed through a search of the HER for Northamptonshire (as of 11 July 2017).

14.11 The effects arising from the Proposed Development on Built Heritage will be direct and indirect in nature having potential to affect the significance of the identified assets through direct works and change within their setting.

14.12 As the Proposed Development has the potential to affect the setting and significance of designated and non-designated heritage assets, mitigation has been designed into the scheme, including (but not limited to):

- Maintaining an area of open space and landscaping to the north of the development area;
- construction of a native structural planting belt that has been designed to respond to the existing site, rather than appearing intrusive and engineered within the wider landscape;
- introduction of a building limit line to ensure that the proposed warehousing is 'set back', further reducing the visual effect of the proposals when viewed from the north and south; and,
- introduction of native tree and shrub planting to visually screen the Proposed Development in views from the north and south.

Construction

14.13 There will be localised and temporary (short to medium term) effects arising from demolition and construction, such as the erection of hoardings, noise, dust and pedestrian / vehicle movements arising from excavation and other building activities,

the use of cranes and other construction equipment / scaffolding as new buildings and structures erected, and wider landscape remodelling. This would be visible and would change the existing experience within the proposed Order Limits during this phase, and also potentially from within the surrounding area.

14.14 The construction phase of the Proposed Development has the potential to indirectly affect the significance of heritage assets through development within their setting. Undertaking construction in accordance with a construction method statement would, however, assist in lowering the scale of effect.

Operation

14.15 For the operational phase, it is concluded that for many of the heritage assets there will be a neutral effect having taken into consideration their significance, the relative distance between them and the Site, the extent of intervening development and the nature of the Proposed Development.

14.16 It has been identified that there are some adverse effects on a number of heritage assets relevant to the Proposed Development that at this stage of assessment remain significant with mitigation in place. A moderate adverse significance of effect has been identified on the grade II listed Milton House and Manor Cottage, Mortimers, Milton Malsor Conservation Area, the grade II listed Lock No 10-11 on the Grand Union Canal during the operation phase. A slight adverse effect has been identified to the grade II listed Lock's 6-9 and the grade II listed Railway Bridge over Northampton Road during the operation phase.

Cumulative

14.17 With regard to cumulative effects of the Proposed Development in combination with other developments, it has been concluded that there will be a cumulative effect with the Northampton Gateway scheme during construction. This is assessed to be significant specifically in relation to Milton Malsor Conservation Area and Mortimers because of construction works such as the movement of materials and construction machinery, including the use of tall construction equipment, which would be expected to give rise to a moderate adverse level of cumulative effect.

14.18 During the operational phase, the scheme will have removed a further section of agricultural fields (to the east) which surround the village and Milton Malsor Conservation Area. Cumulatively, the overall effect of this and the Proposed Development are considered to result in a moderate adverse effect on the significance of the Milton Malsor Conservation Area. Due to the orientation of the grade II listed Mortimers with views of the building facing towards the scheme, it is likely that there will be additional built development and/or gantry cranes experienced within this view (subject to mitigation by the scheme). Nevertheless, the Proposed Development and its associated landscaping works will largely screen the Northamptonshire Gateway scheme in views from the south and south east.

Decommissioning

14.19 The decommissioning phase effects of the Proposed Development as a whole on Built Heritage would be expected to be similar to or less than those experienced during the construction phase.

Summary Conclusion (Built Heritage)

14.20 Significant (moderate) residual effects remain post-mitigation during the construction and operation phases for Milton House, Mortimers, Milton Malsor Conservation Area, Grand Union Canal Conservation Area, and the grade II listed Lock No 10-11. These effects are assessed to be 'less than substantial' harm.

14.21 Of the 354 assets have been assessed (the majority of which lie within the wider Study Area), for the majority of assets there will be a neutral effect.

14.22 The cumulative effect assessment that has been undertaken does not alter the above conclusions.

14.23 Taking into consideration their significance it concluded that overall the Proposed Development would not give rise to substantial harm to the setting of the built heritage assets.

Archaeology

14.24 Chapter 11 of the PEIR considers the potential impacts and effects of the Proposed Development on archaeological sites and features (the 'archaeological resource').

14.25 Specifically relevant to the archaeology assessment is NPS paragraph 5.142 that requires that where there is a high probability that a development site may include as yet undiscovered heritage assets with archaeological interest, the Secretary of State should consider requirements to ensure that appropriate procedures are in place for the identification and treatment of such assets discovered during construction.

14.26 Data collection and surveying has included a variety of methods, including, but not limited to:

- Desk-based information – in respect of sites and features of potential archaeological interest and on historic land-use development, from sources such as: Historic England Designation Data; Northamptonshire Council Historic Environment Record (HER) and Northamptonshire Archives; Heritage Gateway; Pastscape; Images of England; Ordnance Survey; on-line aerial photography; bibliographic, documentary and internet sources; existing reports relevant to the Main SRFI Site.

- Reconnaissance Field Survey - to assess the information obtained through desk-based assessment; to identify the extent and condition of any visible archaeological sites or features; to inform an assessment of archaeological potential; and to assess the topography and geomorphology.

- Hedgerow survey and data - including identification of hedgerows identified as important under the Hedgerows Regulations.

- Geophysical survey - to test for the presence of anomalies of possible archaeological interest, carried out in accordance with a Written Scheme of Investigation (WSI) agreed by the NCC Archaeology Team.

- Archaeological Trial Trench Evaluation - a programme of archaeological trial trenching evaluation carried out in accordance with a Written Scheme of Investigation (WSI) agreed by the NCC Archaeology Team.

14.27 The archaeology assessment considered the potential for direct impacts, such as removal of, or damage to, archaeological sites and features arising from the construction, operation and decommissioning of the Proposed Development. The study areas included the Main SRFI Site, the J15a Works and the locations of other minor highways works.

14.28 The archaeology assessment was, therefore, restricted to the Main SRFI Site, M1 J15a and the A43/A5 Tove Roundabout. A desk-based assessment and walkover survey was carried out of these locations and geophysical survey and archaeological trial trench evaluation was carried out within the Main SRFI Site. The desk-based assessment used data from the Northamptonshire Historic Environment Record (HER) and a range of other sources including historic maps, aerial photography and Lidar data and bibliographic sources

14.29 The archaeological evaluation demonstrated that the Main SRFI Site contains archaeological remains of later prehistoric, Romano-British and medieval and later date, which could be divided into 15 discrete archaeological sites. Desk-based assessment indicated that the J15a Works and the A43/A5 Tove Roundabout locations have some archaeological potential, with the possibility that archaeological remains of comparable date to those within the Main SRFI Site could be present. However, the land-take required for the proposed reconfiguration of M1 J15a includes a large area for ecological mitigation, which would remain undeveloped. The works required for the highways works lies almost entirely within the existing highways corridors and hence no effect on buried archaeological remains is predicted at this location, and the impacts of the Proposed Development are, therefore, predicted to arise only at the Main SRFI Site and at the A43/A5 Tove Roundabout location.

14.30 As opportunities for preservation in situ are limited, and in order to comply with National and Local Plan Policies, a programme of archaeological mitigation works would be carried out to offset the predicted direct impacts on archaeological assets at the Main SRFI Site and at A43/A5 Tove Roundabout.

14.31 A programme of archaeological mitigation works can be carried out to offset the predicted direct impacts on archaeological assets. The preferred option for mitigation of potential effects on heritage assets is for the preservation of important remains in-situ wherever practicable and by records where preservation is not possible. As opportunities for preservation in situ are limited for this Proposed Development, the mitigation measures presented in the PEIR provide proposals for identifying,

investigating and recording and for enhancement of the archaeological record designed to offset the loss of the archaeological resource.

14.32 The mitigation measures to be adopted would consist of identifying, investigating and recording the archaeological resource identified by geophysical survey and archaeological evaluation within the Main SRFI Site and by desk-based assessment at A43/A5 Tove Roundabout. The mitigation proposals would be set out in one or more Written Schemes of Investigation (WSI) prepared in consultation with the Northamptonshire County Council (NCC) Archaeology Team and designed to satisfy any archaeological planning condition placed on the Proposed Development.

14.33 Whilst the predicted effects on archaeological remains would not be avoided or reduced by the proposed mitigation, they would be offset through preservation by record of the archaeological resource and the dissemination of archaeological knowledge, resulting in enhancement of the archaeological record.

Operation

14.34 The potential for operational effects, arising from the possibility of future construction works being required during the lifetime of the Proposed Development, has also been considered but it is considered that construction phase mitigation, to be agreed with the NCC Archaeology Team will have been sufficient to ensure that no significant operational effects arise during the operational phase.

Decommissioning

14.35 Decommissioning phase effects could arise only if parts that had remained unaffected during the construction and operational phases were to be affected to facilitate any decommissioning procedures required by the Proposed Development. It is likely that any effects on the archaeological resource arising from decommissioning would be similar to, or less than, those experienced during the construction phase.

Cumulative

14.36 The potential cumulative effect of the Proposed Development in combination with other Proposed Developments has been considered; in particular the potential for cumulative effects in combination with the proposed Northampton Gateway development site, adjacent to the Main SRFI Site. It has been assessed that there would be a direct cumulative effect on a group of potentially contemporary archaeological sites on the adjoining developments, but that the cumulative effect will not be significant in EIA terms when the embedded mitigation for the Rail Central development is taken into account.

Summary Conclusion (Archaeology)

14.37 Taking the proposed mitigation into account, no significant residual effects would be anticipated in relation to the archaeological resource and the development proposals would conform to the aims and requirements of national, regional and local planning policy as regards below ground heritage. The completion of an agreed programme of archaeological mitigation works, devised in consultation with NCC Archaeology Team,

would offset the loss of archaeological resources that would occur as a result of the construction of the Proposed Development. This would ensure that the archaeological effects are fully addressed prior to or during the construction phase and it is considered that no post-construction monitoring is required in relation to consideration of the archaeological resource.

Conclusions (Historic Environment)

14.38 The NPS identifies that construction and operation phases of SRFI can have adverse impacts on the historic environment and designated and non-designated heritage assets.

14.39 In accordance with NPS Paragraph 5.129 the impact of the Proposed Development on heritage assets has been assessed taking into account the particular nature of the significance of the heritage assets and the value that they hold.

14.40 NPS Paragraph 5.134 requires that where the Proposed Development will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal.

14.41 In relation to the archaeology assessment, it is recognised that the ability to record evidence of the asset should not be a factor in deciding whether consent should be given (NPS paragraph 5.139). However, where the loss of the whole or part of a heritage asset's significance is justified, as in this case, the Secretary of State should require the applicant to record and advance understanding of the significance of the heritage asset before it is lost (wholly or in part). The extent of the requirement should be proportionate to the importance and the impact (NPS paragraph 5.140).

14.42 In terms of above ground heritage assets, whilst there are a limited number of moderate residual effects that remain post-mitigation during the construction and operation phases (for Milton House, Mortimers, Milton Malsor Conservation Area, Grand Union Canal Conservation Area, and the grade II listed Lock No 10-11), these effects are all assessed to be 'less than substantial' harm. Taking into consideration their significance it concluded that overall the Proposed Development would not give rise to substantial harm to the setting of the built heritage assets and the wider public benefits of the proposals are capable of being attributed weight in favour of the development in accordance with NPS Paragraph 5.134.

14.43 In terms of below ground heritage assets, and taking the proposed mitigation into account, no significant residual effects would be anticipated in relation to the archaeological resource. The completion of an agreed programme of archaeological mitigation works would offset the loss of archaeological resources that would occur as a result of the construction of the Proposed Development.

14.44 It is concluded that the impacts on the historic environment are acceptable. The proposal accords with paragraph 5.126 and 5.127 of the NPS in terms of assessment and paragraph 5.128-5.138 in terms of decision-making considerations, and with Regulation 3 of the Infrastructure Planning (Decisions) Regulations 2010 (as amended).

15. Noise and Vibration

15.1 The NPS sets out at paragraph 5.195 the assessment needed in terms of construction and operational noise of a new rail line, rail freight terminal and warehouse buildings and road improvements arising from the Proposed Development. It goes on to say that the SoS should not grant development consent unless satisfied that the proposals will meet the following aims within the context of sustainable development:

- avoid 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 human 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.

15.2 Noise levels across the Main SRFI Site are generally controlled by road traffic movements on the M1, the A43, and Northampton Road. Train movements on the WCML and NLL lines are intermittently audible.

15.3 The noise and vibration assessment is provided at Chapter 18 of the PEIR and considers the effects of the Proposed Development on a range of receptors including residential dwellings, care homes and schools as well as amenity/recreational areas including the canal, its associated marinas and towpaths, and existing and proposed new footpaths. The assessment also considers the impact to ecological receptors, and heritage receptors.

15.4 The calculations of construction and operational noise have been based on worst-case assessments (as an example, assuming that the acoustic centre of the noise generating activity is assumed to be at the minimum distance from the boundary of the works nearest to the Noise Sensitive Receptor (NSR)).

15.5 Mitigation in the form of earth bunds is embedded into the Proposed Development. Other mitigation measures are adaptive (an example would be acoustic barriers) and will therefore be subject to detailed design as the design is further developed.

15.6 Measures will be set out in the CEMP, to ensure that noise and vibration from the construction of the site is kept to a minimum.

15.7 The assessment recognises that construction and decommissioning would be temporary and relatively short term activities when compared to operation, which would be a long term and relatively permanent activity. Noise from construction can be highly variable but is typically short lived at any given receptor, particularly as the focus of activity is mobile. In contrast, operational activities would be continuous across the Proposed Development and would appear to be stationary, much like noise from road traffic movements on distant roads. Consequently, noise from construction is considered to have a lower potential to cause adverse effects than noise from operation. This is reflected in current guidance and Standards.

Construction

15.8 The significance effects have been established based on calculations of impact at the nearest sensitive receptors. The calculations are based on a typical equipment list for each activity using noise data taken from measurements presented in Standards and manufacturers' specifications and assuming a typical worst case scenario where several activities are carried out simultaneously.

15.9 Various mitigation methods have been proposed to reduce the effects of construction noise as far as is reasonably practicable. These are set out in the Construction Environmental Management Plan (CEMP). The most effective of the proposed mitigation methods would be to restrict the hours of noisy construction activities to daytime periods only.

15.10 The results of the construction noise assessment indicates that the effects would generally be of negligible significance at the majority of receptors. At receptors that would be close the boundary of the works, the effects during some of the phases of construction would be of minor significance.

15.11 The potential for vibration impacts during construction have also been assessed. Vibration decays rapidly with distance. Most receptors are more than 100m from proposed work areas at which point vibration would be negligible. There are some receptors that may be potentially nearer than this and the significance of effect could rise to minor. In any case, construction activities within 100m of a residential receptor should generally be accompanied by a programme of vibration monitoring. This would include notification of occupied affected residential NSRs advising the activity, its duration and likely effect and advising that monitoring will be undertaken.

Operation

15.12 The assessment of noise from operational activities considers noise generated by activities from within the Main SRFI Site as well as from off-site road and rail traffic movements.

15.13 A computer based 3D noise model has been created to predict the noise levels generated by operational activities from within the Main SRFI Site at nearby receptors. The number and type of noise sources input into the model represent a considered worst case scenario where the Proposed Development is operating at its full capacity. The noise output from each source has been based on manufacturers' data and measurements carried out of similar operational equipment at other similar sites.

15.14 The results of the model have indicated that mitigation would be required to reduce noise to acceptable levels at some receptors. The effectiveness of the proposed mitigation, which consists primarily of earth bunds and acoustic screens, has been tested in the model.

15.15 The results indicate that, with the proposed mitigation in place, there would be a negligible to minor significance of effect at the majority of residential receptors during the sensitive early night time period. At four residential receptors, noise levels during this period have been predicted, with a series of worst case assumptions, to be

approaching, at, or up to 1dB above, the threshold of moderate significance of effect. During the daytime period, all residential receptors would be subject to a negligible significance of effect.

15.16 At recreational receptors such as Gayton Marina, the canal, and public footpaths near to the Proposed Development, the significance of effect is predicted to be negligible to minor at most locations. On the footpath that runs parallel and to the east of the proposed intermodal platform the significance of effect would rise to moderate at locations in close proximity to an operating gantry crane.

15.17 It should be noted that the predicted noise impacts used in the assessment would be a worst case, based on robust assumptions relating to the extent of activity at the site, the number of noise sources and their respective sound outputs, and by testing a fully operational scenario that would not occur until at least 2031 against the 2016 baseline noise environment. In practice, the operational noise impact of the Proposed Development is likely to be lower, particularly during the night time period when activities are likely to be less intensive than they would be during the daytime. It is considered, therefore, that the significance of effect of the on-site operational activities as a whole would be minor and thus not significant.

15.18 There is the potential for some vibration to be generated by operational activities within the Main SRFI Site, particularly on the Intermodal Platform. Such activities may include, for example, the stacking of containers and slow moving shunters on on-site lines. However, vibration decays rapidly with distance. Receptors are generally located far from the Intermodal Platform. Additionally, these activities are not considered to be significant sources of vibration. Consequently, the significance of effect is considered to be negligible.

15.19 The effect of additional road traffic movements on local roads and the wider network as a result of the operation of the Proposed Development has been assessed. The significance of effect has been determined by establishing both the short term and long term noise level changes in road traffic noise as compared to the baseline condition in the opening year. Although further assessment is required, the results of the assessment indicate that the significance of effect is likely to be typically negligible to minor.

15.20 The effect of additional rail traffic movements on the WCML as a result of the operation of the Proposed Development has been assessed. The significance of effect has been determined by establishing both the short term and long term noise level changes in rail traffic noise as compared to the baseline condition in the opening year. The results of the assessment indicate that the significance of effect is negligible.

15.21 Freight trains travelling on the rail network have the potential for generating vibration. Baseline vibration monitoring of the existing high speed passenger and rail freight traffic indicates very low existing vibration levels. Slower moving freight trains arriving and departing the Proposed Development would generate less vibration than the existing faster moving freight trains on the WCML. Given the anticipated increases in rail traffic movements on the WCML resulting from the operation of the Proposed Development, the significance of effect of rail vibration is considered to be negligible.

Decommissioning

15.22 It is considered that in the worst case the effects of decommissioning noise would be similar to or less than that of construction. The equipment and machinery used for decommissioning would be similar to that of construction and it is likely that manufacturers of equipment and machinery in the future will have to meet more onerous noise limits than currently required as noise policy is updated in line with technological advancements in noise control. The assessment of construction noise and vibration is therefore considered to provide a reasonable worst case indication of the likely effects that may arise as a result of decommissioning.

Monitoring

15.23 Monitoring of noise and vibration will be required, and further details are included within the draft CEMP. These are likely to cover noise and vibration monitoring during construction and operation.

Cumulative

15.24 Full evaluation of the potential of other developments to contribute to a potential cumulative noise effect has been undertaken. Significant effects do not arise.

Conclusions (Noise & Vibration)

15.25 The assessment of likely significant noise impacts has included identification of sources of noise, noise sensitive receptors, characteristics of the existing noise environment, an assessment of the effect of predicted changes in the noise environment and how noise will change as part of the Proposed Development across different time periods and times of day and night. Relevant British Standards and other guidance have been used.

15.26 Measures to be used to mitigate noise effects using the best available techniques have been considered. In considering mitigation, the design and subsequent assessment has considered engineering, layout, and the potential to specify acceptable noise limits and times of use.

15.27 In accordance with NPS paragraph 5.194, the Proposed Development has evolved taking account of the optimisation of the scheme layout to minimise noise emissions and, where possible, the use of landscaping, bunds and acoustic barriers, and the transport network.

15.28 Further, and in accordance with NPS paragraph 5.193, the noise and vibration assessment has been undertaken in accordance with statutory requirements for noise, and the relevant sections of the Noise Policy Statement for England, the NPPF, and associated guidance.

15.29 The assessment has shown that the construction and operation of the Proposed Development does not result in significant effects with mitigation in place.

15.30 The proposals will meet the identified aims summarised in paragraph 5.195 of the NPS in accordance with Government policy on sustainable development, as well as providing appropriate mitigation where necessary.

15.31 The noise created by the new development avoids, mitigates and minimises significant adverse impacts on health and quality of life and through management and control of noise, contributes to improvements to health and quality of life. In such circumstances the NPS advises that development consent is capable of being granted.

16. Biodiversity, Ecology and Nature Conservation

16.1 Paragraph 5.23 of the NPS states that the applicant should show how the project has taken advantage of the opportunities to conserve and enhance biodiversity (and geological) conservation interests. This reflects the NPPF which sets out the ways the planning system should enhance the natural and local environment. Matters that should be considered in decision-making are described in paragraphs 5.24 and 5.35 and mitigation in paragraphs 5.36 to 5.38 of the NPS.

16.2 The ecology assessment is reported at Chapter 16 of the PEIR.

16.3 Consultation with interest groups and organisations has been undertaken to acquire local background data and/or to discuss particular aspects of ecological survey and mitigation. This has included discussions with (amongst others) Natural England, the Environment Agency, Wildlife Trust for Bedfordshire, Cambridgeshire & Northamptonshire, the Woodlands Trust, the Bat Conservation Trust, and relevant local groups.

16.4 The zone of influence (the area within which ecological features may be affected) has been determined with reference to important ecological features on or around the proposed Order Limits (including designated sites), the extent and nature of project activities liable to give rise to potentially significant impacts, any incidence of mobile or migratory species, seasonality of ecological features, and ecosystem functioning including interdependencies between ecological features.

16.5 The identified Zone of Influence includes few 'important ecological features' outside the Main SRFI Site boundary, as these are scarce given the intensively agricultural area surrounding the site (they are mostly concentrated around the canal system to the south-west). Far-ranging birds have, however, been a consideration. The Upper Nene Valley Gravel Pits Special Protection Area (SPA), which is located approximately 5.6km away, has been included within the Zone of Influence, thus forming part of the study area.

16.6 The assessment has followed the latest Chartered Institute of Ecology and Environmental Management (CIEEM) guidelines, and has involved the following key stages:

- a background data search to obtain archival records of sites and species, and to gain information to focus the field surveys;
- identifying the Zone of Influence (Study Area) arising from the whole lifespan of the project;
- identifying ecological features through field surveys;
- determination of the ecological value of ecological features;
- identification of the potential impacts and assessment of impacts on the integrity or conservation status of the ecological features;

- incorporation of ecological enhancement and mitigation measures to avoid or reduce impacts, and compensation measures to balance any unavoidable significant impacts; and,
- assessment of the significance of any residual ecological impacts remaining after the implementation of mitigation and compensation measures.

16.7 Desk-based and field surveys have included:

- Ecological Background Data Search;
- Phase 1 Habitat Survey and assessment of habitat for protected animals;
- Phase 2 Botany – NVC and other surveys;
- Phase 2 Botany - Hedgerow surveys;
- Veteran Tree Survey;
- Amphibians - Habitat Suitability Index and presence / absence for Great Crested Newt;
- Aquatic Invertebrates;
- Badger;
- Bats (tree roost potential);
- Bats – tree climbing surveys;
- Bats – tree emergence and dawn surveys;
- Bats (initial building assessment);
- Bats (emergence / dawn re-entry);
- Bats (activity);
- Breeding birds and barn owls;
- Golden plover and lapwing surveys;
- Reptiles;
- White clawed crayfish; and,
- Terrestrial invertebrates.

16.8 Field surveys were undertaken at the Main SRFI Site and J15a Site. No field surveys have been completed for the Minor Highway Works, beyond a drive-past site visit. At

this stage, there is insufficient information about the nature of the vegetation clearance required, to be able to define the scope of field surveys at the Minor Highway Works locations. A high level appraisal has, however, been carried out using satellite photography (Lidar), of the habitat that may be directly affected by minor highways works. Provisional proposals for data collection and further survey to be completed prior to construction, have been provided as part of the PEIR assessment.

Statutory and Non-Statutory Designations

16.9 Among other considerations, the following designations have been considered as part of the assessment:

- There are five statutory designated sites within 5km of the boundary of the Main SRFI Site: two SSSIs and three Local Nature Reserves (LNRs). In addition the Upper Nene Valley Gravel Pits Special Protection Area (SPA) is within 5.6km of the Main SRFI Site.

- There are 107 non-statutory designated sites within 5km of the Main SRFI Site, comprising 1 Local Geological Site (LGS), 38 Local Wildlife Sites (LWS), 3 Pocket Parks (PP), 58 Potential Wildlife Sites (pWS), 3 Protected Wildflower Verges (PWV) and 4 Wildlife Trust Reserves (WTR).

- There are 85 non-statutory designated sites are between 2km and 5km from the Main SRFI Site and are sufficiently far from the Main SRFI Site to ensure they will not be affected during construction or operation, and these are not considered further in the assessment.

- There are areas of ancient woodland within 5km of the Main SRFI Site. They comprise areas of Ancient Semi-Natural Woodland (ASNW) and areas of Planted Ancient Woodland (PAWS). The nearest area of ancient woodland is approximately 3km to the south.

- There are seven statutory designated sites within 5km of the J15a site boundary comprising three SSSIs and four LNRs. The closest is over 2km.

- There are 41 non-statutory designated sites within 2km of the J15a site comprising one Local Geological Site, 16 Local Wildlife Site, 22 potential Wildlife Sites and two Wildlife Trust Reserves.

- Two of the minor highway works have statutory designated sites within 100m: Junction 10 Barnes Meadow Interchange, and Junction 19 Upton Way/Telford Way Roundabout.

16.10 In summary, no statutory designated sites for ecology are within the proposed Order Limits for the scheme. The works at Junction 10 (Barnes Lane Interchange) are adjacent to a LNR. Two PWS are within the proposed Order Limits at the Main SRFI site, and One Local Wildlife Site (Grand Union Canal), and an un-named PWS are within the proposed Order Limits at the J15a Site.

16.11 Consultation with Natural England has confirmed that no impacts to the SPA/Ramsar site are likely to arise from the construction or operation of the Main SRFI Site or J15a works.

16.12 The design of the Proposed Development has sought to avoid significant ecological effects through careful design, applying the mitigation hierarchy:

- Avoidance – seek options that avoid harm to ecological features.
- Mitigation – where avoidance of effects is not possible, suitable mitigation should be implemented to ensure that the residual effects are not significant. This should be achieved either through the design of the project (embedded mitigation) or subsequent measures (adaptive mitigation) that can be guaranteed. Mitigation is relevant for negative impacts assessed as being potentially significant (before mitigation) or where required to ensure compliance with legislation.
- Compensation – where there are significant residual adverse ecological effects despite the mitigation proposed, these should be offset by appropriate compensatory measures. Compensation is relevant for negative impacts assessed as being significant or where required to ensure compliance with legislation.
- Enhancements – seek to provide net benefits for biodiversity over and above requirements for avoidance, mitigation or compensation. Opportunities to provide nature conservation enhancement have been incorporated within the Proposed Development, where possible.

16.13 The parameters plans and green infrastructure plans have been developed through an iterative design process with inputs from various environmental disciplines. Through this process an area of land has been excluded from the area to be developed, so that it can be used for ecology mitigation, principally for hedgerows and farmland birds.

16.14 Effects arising from the Proposed Development will arise from construction activity and during operation. The design of the Proposed Development aims to minimise these effects as far as possible through mitigation embedded into the site design. This includes:

- Retention of habitat, including certain buildings used by bats, the northern section of the Milton Malsor Brook, some ancient and veteran trees and other areas of woodland and habitat at the periphery of the Main SRFI Site and at J15a.
- Provision of green infrastructure, creating links through the site to the wider countryside and to locally designated sites. There is approximately 116.7 hectares of structural landscape shown on the Green Infrastructure Plan for the main site. Of this 13.8 hectares is retained farmland to the east of the Northampton Loop and 3.2 hectares will be developed as a

new pocket park to the west of the A43. Except for ornamental planting around car parks and buildings, the majority of the planting will use native species in grassland, scrub and woodland planting. Stand-alone hedges will form an important part of the planting. In addition to this a further 26 hectares of land to the south of J15a will be developed as an ecological mitigation area.

- Ecological protection measures are described in the Construction Environmental Management Plan (CEMP). These include good practice measures to protect habitats during construction.

16.15 A CEMP would ensure that matters such as the following are addressed: installation and maintenance of fencing at the start of construction; environmental awareness training for construction personnel; dust control; appropriate storage of fuels, lubricants and chemicals; lighting; environmental management. These topics would be accompanied by specific advice on ecological issues to be followed during construction, particularly during clearance of vegetation for groundwork (including protection of breeding birds, great crested newts, retained trees and hedgerows).

16.16 There is potential to further enhance and improve the function of the proposed green infrastructure, including, for example, design of wildlife hedgerows with oversized culverts to facilitate passage of small mammals through the site. Additional adaptive mitigation will ensure delivery of potential benefits, and ensure that benefits are tailored to species that it is desirable to promote in the Northamptonshire context. In addition, it will ensure that any adverse impacts on biodiversity are more than counterbalanced by benefits from green infrastructure in accordance with planning policy.

16.17 As the minor highway works are within the adopted highway, no significant cumulative effects to ecological features are expected.

Construction

16.18 Direct permanent adverse effects will arise primarily from land-take, which will be by far the most important source of effect given the particular important ecological features that have been identified by the assessment. In the absence of mitigation these effects would include, but are not limited to:

- loss of arable farmland habitat and agricultural grassland (including hedges) important for farmland birds;

- loss of a generally intact hedgerow network over large parts of the Main SRFI Site (foraging habitat and commuting routes);

- loss of some species-rich hedges, veteran trees, semi-improved neutral agricultural grassland, temporary or permanent loss of mixed scrub, tall-herb vegetation and grassland on railway line-sides and the A43 verges;

- rerouting of a section of the Milton Malsor Brook and loss of some wet ditches connecting to it;
- loss of roosts used by small numbers of Common Pipistrelle bats;
- permanent loss of barn owl roosts in trees and farm buildings; and
- some loss of aquatic and water margin vegetation (J.15a works).

16.19 Direct, temporary, adverse effects will arise primarily from construction activity. In the absence of mitigation these effects could include (for example): sediment laden run off into watercourses; dust deposition on adjacent habitats; disturbance to animals in adjacent habitat from noise generation; construction site lighting; traffic and the presence of personnel (*etc*). These impacts can be reduced to minimal levels acceptable for wider purposes (including health and safety) by measures set out in the CEMP.

16.20 There remains a possibility of some level of disturbance to animals in the most sensitive adjacent habitats, especially the Grand Union Canal corridor. This will be addressed by adaptive mitigation. In particular there may be temporary disturbance (mainly noise and visual disturbance) in the canal corridor during landscaping works on immediately adjacent land that in the long term will provide buffering against operational disturbance. While this may not greatly exceed the disturbance likely from agricultural operations such as combine-harvesting, much of the land adjacent to the canal is under permanent grass where such operations are infrequent.

16.21 Direct, permanent, beneficial effects will arise primarily from the provision of green infrastructure. Since a large percentage of the Main SRFI Site is arable supporting very little biodiversity (on an amount per unit area basis), the green infrastructure would provide a net increase in biodiversity even without the incorporation of ecological mitigation into the landscape design.

16.22 A new circa 25ha area will be dedicated to ecology mitigation at J15a. Without adaptive mitigation, this area would remain as farmland with no enhancements, and it would add no specific ecological benefit. In order to mitigate for adverse ecological effects arising from a range of habitats and species over the scheme as a whole, the ecological mitigation area will be subject to baseline surveys and detailed design in consultation with ecologists. The construction management plan will ensure construction is conducted in a way that prevents or minimises possible effects on the canal, and additional adaptive mitigation will be secured in order to avoid adverse effects on animal species.

16.23 The landscape design has been developed in order to minimise tree removal. It is not possible to 'replace' a veteran/notable tree within any realistic timescale; however, there are some measures that are recognised as beneficial (in addition to further tree planting) where there is no alternative to removal. These include: tree resurrection; limb/feature re-attachment; and, deadwood habitat piles. A Veteran Tree Assessment report has been prepared that justifies the approached proposed.

16.24 Overall, it is not to be expected that the green infrastructure will provide habitat suitable for all of the farmland plant and animal species that are likely to be lost, and therefore it is not to be expected that all adverse impacts will be avoided by provision of the green infrastructure (in the absence of further mitigation). However, other species are likely to benefit.

16.25 During construction, the following beneficial effects are assessed to arise:

- Breeding birds in relation to works at the Main SRFI Site: provision of extensive nesting habitat in green infrastructure of grassland and scrub (minor beneficial);
- Provision of new Green Infrastructure at the Main SRFI Site (minor beneficial); and
- Provision of an Ecology Mitigation Area at J15a (minor beneficial).

Operation

16.26 Temporary adverse impacts and effects during operation may arise from various types of activity on the site including traffic movements, the presence of people, site maintenance and repair, lighting, etc. Potential impacts and effects on ecological resources during operation include: disturbance of animal species in adjacent areas due to increased presence of people and vehicles, and associated activity giving rise to noise, vibration etc, and damage to mitigation work through accident or acts of vandalism.

16.27 Site operation and management plans are likely to minimise this, and effects on adjacent sites and especially on the Grand Union Canal corridor, will be minimised by the green infrastructure (which will become more effective in this respect as time progresses). It is not therefore expected that disturbance to adjacent habitats will be greater than that arising from current agricultural, commercial and pedestrian activities.

16.28 Potential for effects on plants and animals from rainwater runoff from car-parks and other areas of hard-standing will be minimised by means of suitable drainage provision, as well as site operation and management plans, and there are unlikely to be adverse impacts. The cessation of agricultural chemical use in combination with the suitable drainage provision may lead to improved water quality and beneficial impacts effects on plants and animals.

16.29 During operation of the Proposed Development there may be some disturbance to animals on the site and in adjacent habitats, especially the canal corridor. This includes effects on flying routes for bats such as the Grand Union Canal, hedgerows and watercourses. Impacts of noise and disturbance may also affect animals and birds on site.

16.30 In order to reduce the impact of these identified effects, 'adaptive' mitigation is proposed. This includes:

- 39.2ha of scrub and woodland planting.

- c. 2,300 large stature trees will be incorporated into the scheme design.
- Creation of new grasslands using a native and locally appropriate seed mix which mimics typical wildflower meadows for Northamptonshire. To support populations of the Yellow-faced Bee, mixes will include Daucus carota ssp. carota (Wild Carrot).
- Veteran trees will be reused in measures such as such as tree resurrection (i.e. using large trunks or limbs of felled trees to provide high-elevated deadwood habitat by using existing trees as supports) and deadwood habitat piles will help to compensate for loss of ancient and veteran trees.
- Development of a Lighting scheme to ensure light on site during construction and operation of the site will avoid spill into ecologically important places.
- Specifications for new hedgerow planting to enhance 'embedded' retained foraging and commuting routes and create more.
- Renovation of barns at the Main SRFI Site and J15a site to provide bat and barn owl habitat.
- Milton Malsor brook diversion will be profiled to provide a variety of flow rates, depth and widths (allowing for Environment Agency specifications), and planted with water-margin species currently found there and in adjacent ditches. The detailed design of the watercourse will be undertaken in collaboration with ecologists, and it is anticipated that the overall quality of the brook will be enhanced for otters, fish and aquatic invertebrates.
- The planting adjacent to the Grand Union Canal and The Arm Farm pocket park beside the Northampton Arm will improve the connectivity of the ecological corridor centred on the canal.
- Detailed design of the 26 ha ecological mitigation area at J15a. The area will be managed as farmland, ideally with livestock in some areas, but will also include a public access track. The site will be designed by ecologists in discussion with the Wildlife Trust, but will include a mixture of field sizes and shapes, new species rich native-species hedgerows with standard trees, wet scrapes and scrub, 'winter bird' fields, and field corner ponds.
- A post-construction Habitat Management Plan (HMP) will protect and promote biodiversity in areas retained for ecology and in newly created habitats. It will cover such matters as pond management, scrub control, hedgerow pruning, and retention of dead or felled trees among others. It will include provisions for monitoring retained and created habitats and key species.

16.31 Overall, although minor adverse effects will remain as a result of habitat loss, especially for farmyard birds and bats, loss of hedgerows and veteran trees, permanent beneficial effects will arise primarily from the provision of green infrastructure. Since a large percentage of both the Main SRFI Site and J15a site is

arable, supporting very little biodiversity (on an amount per unit area basis), the green infrastructure and incorporation of ecological mitigation measures as adaptive mitigation will provide a net increase in biodiversity.

16.32 Beneficial effects are assessed to arise in relation to:

- Mixed habitat provision at the Main SRFI Site, with use of the green infrastructure by the public providing ecological amenity (minor beneficial); and

- Mixed habitat provision at J15a, with use of the footpath through the c.25 ha ecology mitigation area by the public providing ecological amenity (minor beneficial).

Cumulative

16.33 Lists of proposed plans and projects within 5km of the Main SRFI Site and 2km of the J15a Works site have been 'filtered' to extract those that require significant land-take. These were examined in further detail to see whether there might be any accumulated impact. There are no cases where the impacts of the Proposed Development could significantly add to something identified as an impact in another project. There is, however, potential to add to cumulative impacts of hedgerow loss, which could be significant at a county scale. Here it is the integrity of hedgerow networks that is likely to be the main concern, though loss of individually important hedges may also occur. There is some potential for cumulative effects on commuting and foraging bats in consequence of this. Similarly, there is potential to add to the cumulative impacts of farmland habitat loss on specialist farmland bird species which could be significant at county scale. Habitat provided in compensation for the Rail Central project, and others, is likely to lead to a net gain in habitat for a broad spectrum of birds, especially garden birds, but compensatory habitat would not be suitable for specialist farmland birds which favour the traditional landscape of hedgerows and large open fields.

16.34 A review of the scoping report for the Northamptonshire Gateway project indicates that the sensitive ecological receptors are very similar to those at the Main SRFI Site, comprising hedgerows, mature trees, bat foraging and commuting habitat, and farmland bird habitat. However, in addition there are great crested newt breeding and terrestrial habitat, golden plover over-wintering habitat (in regular use), and reptile habitat (including a low population of common lizard). There is circa 13.5ha of land that lies within both sites, which is earmarked for green infrastructure although not for ecological mitigation. If the Northamptonshire Gateway Project were to secure this land, then the green infrastructure provision would be reduced. If the Northamptonshire Gateway Project were to use the land for ecological mitigation then there would be a beneficial effect for the Rail Central Scheme owing to its proximity.

Monitoring

16.35 Ongoing monitoring of habitats created and enhanced will be needed to ensure it meets the required level of quality. A Habitat Management Plan will be produced which will include a monitoring plan. Monitoring will initially be undertaken annually during the summer for the first 3-years while the vegetation becomes established, in year 5 and then subsequently every three years.

Conclusions (Biodiversity)

16.36 Development should avoid significant harm to biodiversity and geological conservation interests and where such cannot be mitigated or avoided, appropriate compensation measures should be sought as a last resort. The SoS should ensure that appropriate weight is attached to designated sites, protected species, habitats and other species of principle importance for the conservation of biodiversity.

16.37 The PEIR has assessed likely significant effects on internationally, nationally and locally designated ecological sites and protected species and habitats, and has demonstrated how the Proposed Development has used opportunities to conserve and enhance biodiversity and geological conservation interests. The Proposed Development has avoided significant harm to biodiversity and conservation interests where possible, and has provided integral mitigation and appropriate compensation measures where necessary.

16.38 Appropriate mitigation measures are integral to the Proposed Development and demonstrate good practice during construction and operation. The mitigation proposed by the assessment outlines the measures that will be required to ensure impacts to wildlife and habitats are minimised during construction and operation of the Proposed Development. The green infrastructure has been designed to take into account habitats and species already present on the site. The development and adoption of detailed landscape prescriptions will ensure the delivery and long-term management of open spaces, including those which are to be managed for wildlife.

16.39 Where necessary, it would be possible for the SoS to attach Requirements as part of the issuing of Development Consent in order to ensure that mitigation and monitoring measures are delivered.

16.40 Proposals for the conservation of veteran trees and the reasons for any unavoidable losses have been provided in the PEIR assessment in accordance with NPS paragraph 5.32, and, the national need for and benefits of the Proposed Development in this location clearly outweighs any losses.

16.41 The assessment confirms that with mitigation, the Proposed Development does not result in significant effects.

16.42 It is concluded that Paragraphs 5.20-5.38 of the NPS have been satisfied.

17. Flood Risk, Hydrology & Water Quality

17.1 The NPS states that a flood risk assessment should be carried out if the application is in Flood Zones 2 and 3, and in Flood Zone 1 (low probability) for projects of 1 ha or greater. The volumes and peak flows of surface water leaving the Main SRFI Site should be no greater than the rates prior to the proposed project, unless specific off-site arrangements are made and result in the same net effect (NPS paragraph 5.113).

17.2 Hydrology, drainage and flood risk is assessed in the PEIR at Chapter 14. However, the hydrogeological regime, comprising the groundwater in any permeable deposits (rock, soil or Made Ground) beneath the site, and the hydrological regime (surface water), insofar as they interact with land contamination, are assessed in Chapter 13 of the PEIR relating to ground conditions. There is some cross-over therefore between the summaries provided here in this Planning Statement.

17.3 Paragraph 5.219 of the NPS recognises that during construction and operation, projects can lead to increased demand for water, and discharges of pollutants to water causing adverse ecological impacts. In turn, these could compromise environmental objectives established under the Water Framework Directive[58]. Activities that discharge to the water environment are subject to pollution control. For this reason, decisions under the PA2008 should complement but not duplicate those taken under the relevant pollution control regime (NPS paragraph 4.50).

17.4 The NPS also advises (amongst other things) that the existing quality of waters, water resources, physical characteristics of the water environment (including quantity and dynamics of flow) and protected areas (as described in the NPS) should be considered.

17.5 The Proposed Development includes embedded mitigation that has been developed in conjunction with the flood risk and drainage strategy.

17.6 Environment Agency flood risk data has been reviewed, which shows that the lower lying areas within the western section of the Main SRFI Site, and those areas immediately adjacent to the Milton Malsor Brook to be at an increased risk of fluvial flooding and Flood Zone 3. The remainder of the site is shown as being within Flood Zone 1.

17.7 Mitigation is required to minimise the risk to the Proposed Development through the realignment of both the Milton Malsor Brook and an 'Unnamed Watercourse'. Each watercourse has been realigned around the proposed units shown on the Parameters Plan with the channel geometry adopting a two-stage channel designed to provide suitable capacity to contain and convey flows for all flood events up to and including the 1 in 1,000 year extreme flood event. The design of the proposed channels has also included required easements (and allows for green corridors), as well as allowing for the sizing of any new watercourse crossings and culverts. An allowance for climate change based on current guidance has also been included.

[58] Water Framework Directive (2000/60/EC)

17.8 Modelling of the proposed new channel route and geometry has been undertaken. This confirms a significant betterment in flood outlines when compared to the baseline scenario, for the Main SRFI Site but also to third party land downstream. The modelling confirms that the proposed two-stage channel provides sufficient capacity to convey all flows for the 1 in 200 year plus climate change event and the extreme 1 in 1,000 year event.

17.9 The surface water drainage system to be installed as part of the Proposed Development works will involve the construction of a new system (as enabling works and therefore as embedded mitigation). The principles of this drainage strategy will be to ensure any surface water drainage is designed to ensure post development peak run-off rates will not increase from the existing conditions and as such will result in no increase of flooding to Main SRFI Site or surrounding settlements.

17.10 Given that infiltration techniques have been proven as not being viable, it is assumed that, generally, each building unit and its associated hardstanding areas will contain storage features that will deal with their own attenuation requirements. In the majority of cases, because of the land use, the storage is likely to be provided in underground tanks beneath the car park/working yard areas along with open above ground attenuation features where possible.

17.11 It is proposed for any discharge from the Main SRFI Site to be restricted to mimic the existing Greenfield runoff QBAR runoff rate, with attenuation being provided for the 1 in 200 year plus 40% allowance for climate change storm event.

17.12 In a number of locations (areas of soft landscaping) there would be the opportunity to include attenuation ponds/basins that will be able to provide additional storage and deliver the ability to improve water quality before discharging to the existing watercourses within the site. It is also intended to include swales or similar features as conveyance systems and to provide water treatment benefits where there are areas within the layout that will permit.

17.13 With reference to foul water, discussions have been undertaken with Anglian Water and they have identified a lack of capacity to accept any additional flows. Anglian Water is currently undertaking modelling to determine what mitigation works are required. At the time of writing, are ongoing and as such any such mitigation remains subject to confirmation.

17.14 Areas where further mitigation is required are summarised below.

Construction

17.15 With mitigation, the following impacts and effects are not significant.

- Culverting of existing watercourse - appropriate realignment of the watercourse to avoid the proposed built development.

- Loss of floodplain storage as a result of ground re-profiling - redesign of realigned channel to provide a two-stage channel with adequate capacity to convey flows up to and including the 1 in 1,000 year extreme event.

- Restriction of flows within Milton Malsor Brook and Unnamed Watercourse - culvert crossings of both watercourses have been kept to a minimum, with only two new crossings being proposed. The required size has been modelled and detailed within the Flood Risk Assessment. These have been shown to provide suitable capacity, with freeboard, for all events up to and including the 1 in 1,000 year event.

- Loss of permeable ground owing to soil compaction/excavation/construction of units - installation of a detailed surface water drainage system to intercept flows and provided a restricted outfall to surrounding networks (namely the Milton Malsor Brook) to mimic existing conditions. In restricting flows, attenuation will need to be attenuation will be provided through a combination of above and below ground storage.

- Lack of available capacity within receiving foul sewer network - Anglian Water have been consulted and have undertaken modelling and suggested available mitigation needed. This includes the diversion of the existing sewer, and localised upsizing in order to provide sufficient capacity. The final option is currently still under debate and subject to confirmation.

- Given the nature of construction, there is the potential for surface water to be contaminated in the event of a fuel spillage or spillage of any chemicals within the Main SRFI site. Contaminants could potentially enter the surrounding area and watercourses by being transported within generated runoff. The construction management plan provides further details of the mitigation measures to address the potential for this.

- The Proposed Development will reduce infiltration, thus improving the groundwater. In addition, source reduction (betterment) via treatment of any hydrocarbons that exceed the tolerable limits will be undertaken during the construction phase. This will lead to an improvement in water quality.

17.16 The highways works are, generally, not at high risk of flooding. There will be some loss of permeable ground as part of the J.15a Works owing to soil compaction/ excavation/ construction.

17.17 Loss of permeable ground can be mitigated through the installation of a detailed surface water drainage system to intercept flows and provided a restricted outfall to surrounding networks to mimic existing conditions.

Operation

17.18 There is the potential for a decrease in efficiency of both fluvial and surface water features. This can be addressed by a management and maintenance schedule, to be prepared for both the surface water and realigned watercourse. With mitigation, the effects are not significant.

Decommissioning

17.19 When and if the development is decommissioned, the appropriate environmental assessments will be undertaken to identify any significant environmental effects and suitable mitigation methods proposed. Notwithstanding this, professional judgement indicates that it is likely that the effects will be similar to, or less than, those experienced during the construction phase.

Cumulative Effects

17.20 The Proposed Development and any surrounding development will collectively increase the impermeable area. This will increase the volume and rate of surface water runoff from the area. However, surface water for each of the other projects assessed will have a surface water system designed with the requisite attenuation capacity required by both the Environment Agency and Local Lead Flood Authority in order to result in no increase in flood risk elsewhere and as such no cumulative impacts are anticipated with regard to surface water.

17.21 The only impacts to the site would be in the event of un-attenuated discharges or unmitigated significant ground re-profiling and loss of floodplain storage within areas in the upstream sections of the catchment within which all works are proposed. Given no sites are shown in this location, no cumulative impacts are considered to affect the Main SRFI.

Monitoring

17.22 In relation to all phases of the Proposed Development no monitoring post development is considered necessary other than a visual inspection of any watercourse crossings to remove any blockages or identify any structure deficiencies within the system.

Conclusions (Flood Risk, Hydrology & Water Quality)

17.23 The NPS anticipates that FRA should consider all forms of flooding arising from the project and account for the impacts of climate change, as well as acknowledging any residual risk following reduction measures and whether the proposal would remain in operation in a worst case flood event. Evidence should also include a project's drainage system if construction work will have drainage implications. The NPS also advises (amongst other things) that the existing quality of waters, water resources, physical characteristics of the water environment (including quantity and dynamics of flow) and protected areas (as described in the NPS) should be considered. The assessment has had due regard to these factors.

17.24 The FRA, Modelling Assessment, and Drainage Strategy confirm the existing impacts to the site along with the measures required to mitigate any identified potential impacts of the proposals. The results of the risk assessments were used to identify significant effects that could be introduced as part of the project for which mitigation measures would be required.

17.25 The FRA confirms that there are areas at flood risk within the Main SRFI Site, which are predominantly located within the lower elevated sections of the site and in those areas that immediately border the Milton Malsor Brook and the Unnamed Watercourse. The same is the case for the J15a Works and other minor highways works with the majority of each area being at low risk of flooding but with localised lower elevated areas being at potentially increased risk.

17.26 Proposed mitigation measures included within the scheme (realignment and design of watercourse, installation of surface water drainage systems etc) minimise any of the identified impacts. These measures form part of the design of the Main SRFI Site and as such are considered as being embedded mitigation undertaken as enabling works during the construction phases.

17.27 During operation, whilst all embedded mitigation will be in place, adaptive mitigation measures will be required for some receptors (watercourses, attenuation storage areas, swales, pipe runs etc).

17.28 Adaptive mitigation measures proposed to address potential impacts to operational phase receptors include regular and ongoing maintenance of all drainage features. These works are to include visual inspections and any clearance/maintenance works as required.

17.29 The assessment confirms that the site layout and surface water drainage systems can cope with events that exceed the design capacity of the system, and that surface water drainage arrangements can be designed such that the volumes and peak flow rates of surface water leaving the site (or through on-site storage) are no greater than the rates prior to the Proposed Development.

17.30 The assessment that has been carried out meets the requirements of paragraphs 5.92-5.104 of the NPS, and 5.112-5.114 in relation to mitigation. Additionally, the assessment, in conjunction with assessments undertaken in other parts of the PEIR (such as in relation to Ground Conditions and Biodiversity) also complies with NPS paragraphs 5.219-5.231 in relation to water quality.

17.31 With mitigation in place, as set out within the PEIR, there will be no significant adverse effects arising during any phase of the Proposed Development.

18. Air Quality

18.1 The NPS advises that increases in emissions of pollutants during the construction or operation phases of projects in the national networks can result in the worsening of local air quality (NPS paragraph 5.3).

18.2 The NPS advises that the assessment should describe:

- Existing air quality levels;
- a forecast of air quality 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 road traffic generated by the project; and,
- a judgement on the risk as to whether the project would affect the UK's ability to comply with the Air Quality Directive.

18.3 Paragraph 5.81 of the NPS advises that the construction and operation of national networks infrastructure has the potential to create a range of emissions that include noise, light and dust, and also odour, steam, and smoke. All have the potential to have a detrimental impact on amenity or cause a common law nuisance or statutory nuisance under Part III, Environmental Protection Act 1990. The NPS highlights, however, that whilst pollution impacts from some of these emissions (e.g. dust, smoke) are covered in air emissions assessment, others (e.g. odour) may be covered by pollution control or other environmental consenting regimes (where NPS paragraphs 4.48-4.56 and 5.3- 5.15 apply).

18.4 The above considerations that are relevant to air quality have informed the air quality assessment undertaken at Chapter 9 of the PEIR.

18.5 The closest Air Quality Management Area (AQMA) is within neighbouring Northampton. NBC has designated seven AQMAs, all of which are within approximately 8km of the Main SRFI Site. SNC has also designated an AQMA which encompasses the A5 Watling Street, from the Saracens Head crossroads to Silverstone Brook adjacent to 131 Watling Street, due to high levels of nitrogen dioxide (NO2) attributable to road traffic emissions. This AQMA is approximately 5km to the south-west of the Main SRFI Site.

18.6 An assessment of the air quality impacts of the Proposed Development in terms of nitrogen dioxide (NO_2), PM_{10} and $PM_{2.5}$ has been undertaken. The assessment includes an evaluation of the effects from fugitive dust and exhaust emissions associated with construction activities and construction traffic associated with the Proposed Development, in consideration of the impacts upon the surrounding existing sensitive receptors and the impact of the existing air quality on future proposed sensitive receptors. An evaluation of the significance of the potential air quality effects resulting from changes in traffic flow characteristics on the local road and rail network during

the future operation of the Proposed Development, including employee traffic, has also been undertaken. Appropriate mitigation measures are recommended where required.

18.7 During the construction and operational phases, arrivals at and departures from the Proposed Development may change the number, type and speed of vehicles using the local road network. Changes in road vehicle emissions are the most important consideration in terms of air quality during these phases of the development.

18.8 The air quality assessment addresses the elements recommended in the NPPG. The approach is consistent with EPUK/IAQM guidance and Defra's Local Air Quality Management Technical Guidance.

18.9 The assessment includes the key elements listed below:

- assessment of the existing air quality in the study area (existing baseline) and prediction of the future air quality without the development in place (future baseline), using official government estimates from Defra, publically available air quality monitoring data for the area, and relevant Air Quality Review and Assessment documents;

- a qualitative assessment of likely construction-phase impacts with mitigation and controls in place; and,

- a quantitative prediction of the future operational-phase air quality impact with the development in place (with any necessary mitigation), encompassing the impacts of the development traffic on the local area including any effects on the AQMAs.

Construction and Operation

18.10 The results of the modelling indicate that with the Proposed Development, the predicted NO_2, PM_{10} and $PM_{2.5}$ concentrations at existing receptors are below the relevant long and short-term AQS objectives. When the magnitude of change in annual-mean NO_2, PM_{10} and $PM_{2.5}$ concentrations is considered in the context of the absolute predictions, the air quality impacts of the development on existing receptors are categorised as 'negligible' at all receptors. At a number of receptors the predicted concentrations are expected to decrease with the development. Taking into account the geographical extent of the impacts predicted in the study, the overall impact of the development on the surrounding area (for South Northamptonshire) is considered to be 'negligible', using the descriptors adopted for this assessment.

18.11 During construction, the impact of an increase in suspended particulate matter concentrations and deposited dust is assessed to be not significant, provided that a range of dust control and mitigation measures is applied, including using enclosed chutes, use of dust suppression facilities and dampening down of potentially dusty areas.

18.12 During operation, the impact of an increase in NO2, PM10 and PM2.5 concentrations from traffic generated by the development is assessed to be not significant for South

Northamptonshire, provided that mitigation such as travel planning, provision of electric charging points, incentives for low carbon transport, no idling, and monitoring of vehicle types and tree planting.

18.13 Using professional judgement, the resulting air quality effect in South Northamptonshire is considered to be 'not significant' overall. Further modelling will be undertaken to determine the air quality effects in Northampton.

Decommissioning

18.14 The main sources of dust sources during the decommissioning phase will differ to the main sources during the construction phase. The proximity of sensitive receptors could also change. Therefore it is not possible to undertake an assessment of dust during the decommissioning phase but in principle, it should be possible to have lesser effects at source, using phased deconstruction techniques rather than demolition.

18.15 Traffic data for the decommissioning phase is not available so detailed dispersion modelling is not possible. Assuming the number of additional vehicles during the decommissioning phase is the same as during the construction phase, the traffic related emissions are expected to be lower. This is due to the introduction of more cleaner/lower emissions vehicles. On that basis, traffic related emissions from the decommissioning phase are expected to be lower than the construction phase.

Cumulative

18.16 There is the potential for intra-project effects. Changes in the number, type and speed of vehicles using the local road network can affect air quality. Changes in road vehicle emissions and its effect on air quality have been modelled in the PEIR. There is also the potential to affect ecology. There is only one designated habitat site, Road Cutting, which is near to a modelled road in SNC. This SSSI is not sensitive to air quality.

18.17 Inter-project effects have also been assessed. There are a number of developments within 700 m of the Order Limits where cumulative dust from the construction phase has the potential to be an issue. Provided both the Proposed Development and the cumulative developments incorporate appropriate mitigation measures the residual cumulative effect would be 'not significant'. It is unlikely that many of the cumulative developments will be built at the same time.

18.18 Road traffic and traffic-related emissions will be modelled for the submission of the application for Development Consent.

Monitoring

18.19 The CEMP describes the monitoring of dust to be undertaken during the construction phase. This includes visual inspections of the site perimeter and dust levels on site. All dust control equipment will be maintained and maintenance and servicing activities recorded and haul routes will be inspected for integrity and repaired as necessary. Wheel washes and road sweepers will be provided to prevent 'trackout' of mud and potential resuspension of dust from roads off site.

18.20 Monitoring of NO2 in Blisworth and Milton Malsor will continue for three years beyond the completion of the development.

Conclusion (Air Quality)

18.21 The NPS advises that increases in emissions of pollutants during the construction or operation phases of projects in the national networks can result in the worsening of local air quality (NPS paragraph 5.3). In accordance with the NPS the assessment undertaken has considered existing air quality levels, has provided a forecast of air quality at the time of opening, along with any significant air quality effects, their mitigation and any residual effects.

18.22 The assessment modelling demonstrates that with mitigation there would not be any significant air quality impacts as a result of either the construction or operational phases of the development. The construction management plan would be a significant factor in ensuring the construction air quality impacts are maintained at acceptable levels in accordance with both European and National legislation.

18.23 Once the remaining modelling and assessment (as identified above) has been undertaken, a clear judgement on the risk as to whether the project would affect the UK's ability to comply with the Air Quality Directive will be provided (with the conclusion anticipated to be that it would not affect this ability).

18.24 It is concluded that the Proposed Development accords/will accord with paragraphs 5.7 and 5.9 of the NPS, and that the impacts on air quality are acceptable and in compliance with the decision-making requirements in paragraphs 5.10 to 5.13 of the NPS.

19. Ground Conditions and Land Instability

19.1 NPS Paragraph 4.55 advises that in the case of potentially polluting developments, the relevant pollution control authority should be satisfied that potential releases can be adequately regulated under the pollution control framework; and the effects of existing sources of pollution in and around the project 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.

19.2 The NPS states that a preliminary assessment for land instability should be carried out. Furthermore, the NPS recommends that liaison with the Coal Authority should take place if necessary (NPS paragraphs 5.117 to 118).

19.3 NPS Paragraph 5.168 refers specifically to developments on previously developed land, but nevertheless emphasises the need to ensure that the risk posed by land contamination is addressed. NPS paragraph 5.179 goes on to highlight the importance of good design principles including the layout of the Proposed Development and the protection of soils during construction. Applicants should identify any effects, and seek to minimise impacts, on soil quality, taking into account any mitigation measures proposed. Para 5.169 goes on to reference the safeguarding of any mineral resources.

19.4 'Ground Conditions' is assessed in Chapter 13 of the PEIR, with further consideration of the soil resource being considered in Chapter 10 of the PEIR relating to agriculture.

19.5 Chapter 13 identifies the existing soil and geological conditions and development constraints, evaluates the potential for contamination and assesses the potential effects on ground conditions. The assessment has considered naturally occurring geological conditions and any man-made deposits, including the physical nature of the rocks, soils and Made Ground, together with information on existing chemical contamination arising from the former and existing uses of the site. Mineral safeguarding and impacts on mineral resources, ground improvement, earthworks, foundation solutions, slope stability and associated geotechnical issues have been assessed.

19.6 Earthworks and geotechnical requirements of the enablement phase works have also been assessed, as the geotechnical characteristics of the soils are one of the factors to determine if excavated soils can be re-used at the site.

19.7 The hydrogeological regime, comprising the groundwater in any permeable deposits (rock, soil or Made Ground) beneath the site, and the hydrological regime (surface water), are described in so much as they interact with land contamination.

19.8 No ground conditions have been found that would prevent the proposed scheme being technically viable with respect to geology, soils or groundwater.

19.9 The site investigation has confirmed that there is no widespread presence of soil contamination at the Main SRFI Site and the desk studies and reviews have indicated

that widespread contamination is not expected at the J15A site or other minor highway works sites.

Construction

19.10 The construction works could lead to contaminated material being exposed and mitigation measures will be required to ensure this does not represent a risk to construction workers, site visitors, trespassers or local residents and workers.

19.11 With regards to construction of the Main SRFI Site, the likely significant effects for the Construction Phase can be summarised as:

- Effects of asbestos present within existing buildings present on site.
- Effects of soil contamination on construction workers, including:
- Metals and PAHs in Made Ground.
- Petroleum hydrocarbons in Made Ground and in the vicinity of historical storage tanks.
- Asbestos in Made Ground.

19.12 With regards to the construction of the J15A Works, the likely significant effects for the Construction Phase can be summarised as:

- Effects of asbestos present within existing buildings (Shepherd's Lodge) present on site.
- Effects of soil contamination on construction workers, including:
  - Metals and PAHs in Made Ground.
  - Petroleum hydrocarbons in Made Ground.
  - Asbestos in Made Ground.

19.13 With regards to construction of the other minor highway works, the likely significant effects for the Construction Phase can be summarised as:

- Effects of soil contamination on construction workers, including:
  - Metals and PAHs in Made Ground.
  - Petroleum hydrocarbons in Made Ground.
  - Asbestos in Made Ground.
- Effects of soil contamination on services, plastics, bitumen's and buried concrete etc. due to PAHs, and petroleum hydrocarbons in Made Ground.

19.14 The above notwithstanding, the PEIR identifies a range of mitigation measures as embedded. During construction this will include appropriate design; prescribed methods of working (including works to be undertaken by appropriately trained (and where required, licenced) personnel, safe working practices and working in accordance with codes of practice); provision of appropriate PPE and RPE (where required) and pre-construction identification of potential contamination by further ground investigation. Mitigation measures (for example in accordance with PPG5) will also be required to protect surface watercourses during construction.

19.15 It is only asbestos in existing buildings impacting site workers during demolition (Main SRFI Site only) that result in a significant effect (major significance). Subject to mitigation in the form of asbestos removal being undertaken by appropriately trained contractors who would be required to obtain appropriate licences, the significance is reduced to negligible.

Operation

19.16 With regards to operation of the Main SRFI Site, the likely significant effects for the Operational Phase can be summarised as:

- Effects of soil contamination on site users, including:
  - Metals and PAHs in Made Ground.
  - Petroleum hydrocarbons in Made Ground.
  - Asbestos in Made Ground.
- Effects of soil contamination on future maintenance workers, particularly with regards to asbestos in Made Ground.
- Effects of radon on site users.
- Effects of soil contamination on construction materials (services, plastics, bitumen's and buried concrete etc.) due to PAHs, and petroleum hydrocarbons in Made Ground.

19.17 With regard to operation of the J15A, and the other minor highway works, the likely significant effects for the Operational Phase can be summarised as:

- Effects of soil contamination on future maintenance workers, particularly with regards to asbestos in Made Ground.
- Effects of soil contamination on services, plastics, bitumen's and buried concrete etc. due to PAHs, and petroleum hydrocarbons in Made Ground.

19.18 During operation, mitigation measures will be required for receptors such as site users, future maintenance workers, buried concrete and buried water supply pipes. Mitigation measures proposed for the potential impacts to operational phase receptors include: design (such as no soakaways in Made Ground); use of appropriate materials (e.g. sulphate resistant concrete and barrier pipe (where required) for

potable water supplies); appropriate materials management to ensure any potentially contaminated Made Ground is not exposed at the surface or in service corridors; and radon barriers in buildings as required.

19.19 It is only the effects of radon on site users that results in a moderate significance of effect. Mitigation will comprise construction of appropriate floor slabs and installation of an appropriate radon membrane, with the result that the significance of effect reduced to negligible.

Decommissioning

19.20 When and if the Proposed Development is decommissioned, the appropriate environmental assessments will be undertaken to identify any significant environmental effects and suitable mitigation methods proposed. Notwithstanding this, professional judgement indicates that it is likely that the effects will be similar to, or less than, those experienced during the construction phase.

Cumulative

19.21 In general, potential cumulative effects to geology, hydrogeology and ground conditions from a contamination perspective are considered possible only where the footprint of Proposed Development interacts with the footprint of other developments that have the potential to impact upon ground conditions. This is in consideration and in recognition that other major developments will be required to be undertaken in accordance with statutory guidance and best practice relating to construction and land contamination.

19.22 Northampton Gateway is the only project which has the potential to have significant inter-project cumulative effects. However, it is considered that no significant cumulative effects will in practice occur as: the existing Northampton Loop Rail Line acts as a barrier to interaction between the two developments; and, based on a review of the ground conditions at both sites, and on the assumption that all works will be undertaken in accordance with suitable geotechnical designs and Specifications to the satisfaction of Network Rail and Building Control, ground stability will not be a significant concern. All works should be undertaken in line with Environmental best practice including PPG5, which would reduce and restrict surface water discharge and run off.

Monitoring

19.23 Monitoring will be required during construction to confirm that the works have been undertaken in accordance with a CEMP, Pollution Prevention Method Statement (PPMS), Remediation Method Statement (RMS), Geotechnical Design Reports and the Earthworks Specifications.

19.24 No post-construction monitoring is required.

Conclusions (Ground Conditions)

19.25 NPS Paragraph 5.168 refers specifically to developments on previously developed land, but nevertheless emphasises the need to ensure that the risk posed by land contamination is addressed. NPS paragraph 5.179 goes on to highlight the importance of good design principles including the layout of the Proposed Development and the protection of soils during construction. Applicants should identify any effects, and seek to minimise impacts, on soil quality, taking into account any mitigation measures proposed. Para 5.169 goes on to reference the safeguarding of any mineral resources.

19.26 Accordingly, ground conditions impacts and effects have been considered and assessed. This has included consideration of soils, geological and ground conditions (including groundwater), potential for contamination, as well as assessment of the mineral resource, ground improvement, earthworks, foundation solutions, land stability and associated geotechnical issues. In accordance with NPS paragraph 4.55 the relevant pollution control authorities have been consulted.

19.27 Detailed assessment tables are provided in the PEIR in relation to impacts, effects and mitigation, where required.

19.28 No ground conditions have been found that would prevent the Proposed Development being technically viable with respect to geology, soils or groundwater.

19.29 The site investigation confirmed that there is no widespread presence of soil contamination at the Main SRFI Site and the desk studies and reviews have indicated that widespread contamination is not expected at the J15A site or other minor highway works.

19.30 The construction works will lead to contaminated material being exposed and mitigation measures will be required to ensure this does not represent a risk to construction workers, site visitors, trespassers or local residents and workers. Mitigation measures during construction will include appropriate design; prescribed methods of working (including works to be undertaken by appropriately trained (and where required, licenced) personnel, safe working practices and working in accordance with codes of practice); provision of appropriate Personal Protective Equipment (PPE) and Respiratory Protective Equipment (RPE) (where required) and pre-construction identification of potential contamination by further ground investigation.

19.31 Mitigation measures, for example in accordance with Pollution Prevention Guidelines (PPG5), will also be required to protect surface watercourses during construction.

19.32 During operation, mitigation measures will be required for receptors such as site users, future maintenance workers, buried concrete and buried water supply pipes. Mitigation measures proposed for the potential impacts to operational phase receptors include: design (such as no soakaways in Made Ground); use of appropriate materials (e.g. sulphate resistant concrete and barrier pipes, where required, for potable water supplies); appropriate materials management to ensure any potentially contaminated Made Ground is not exposed at the surface or in service corridors; and radon barriers in buildings as required.

19.33 Monitoring will be required during construction to confirm that the works have been undertaken. No post-construction monitoring is required.

19.34 With mitigation in place, as set out within the PEIR, there will be no significant adverse effects arising during any phase of the Proposed Development. In relation to heavy metals, metalloids, and hydrocarbons there are some beneficial effects identified due to improvements to made ground and in respect of infiltration.

20. Climate change adaptation

20.1 The NPS sets out the value and importance of rail freight explaining that rail transport has a crucial role to play in delivering significant reductions in pollution and congestion. It states that tonne for tonne, rail freight produces 70% less carbon emissions than road freight, up to 15 times lower NOx emissions and nearly 90% lower PM10 emissions. It also has de-congestion benefits depending on its location, each freight train can remove between 43 and 77 HGVs from the road (paragraph 2.35).The NPS sets out the government's aim to facilitate modal shift from road to rail and that a network of SRFIs is a key element supporting sustainable distribution (Paragraph 2.44).

20.2 Paragraph 4.40 of the NPS states that the environmental statement (PEIR in this case) should set out how the proposal will take account of the projected impacts of climate change which can be placed into two specific categories:

(i) Climate Change Mitigation – How the Proposed Development contributes to the cause of climate change through the emission or reduction of greenhouse gases (GHG) as a result of the Proposed Development; and

(ii) Climate Change Adaptation – How the Proposed Development is affected by the projected changes to the future climate and whether measures are required to adapt to this changing climate.

20.3 For climate change adaptation, paragraphs 4.36 - 4.47 of the NPS provide guidance on the methodology for assessing climate change impacts. The applicant should utilise the latest UK Climate Projections (UKCP09) available at the time and utilise the high emission scenario against the 2080 climate projections. The NPS also requires the applicant to ensure that appropriate mitigation or adaptation measures are identified to cover the estimated lifetime of the proposed infrastructure.

20.4 Paragraphs 5.17-5.19 of the NPS provide further guidance on assessing the carbon (in this context an abbreviation for all key GHG covered by the Kyoto Protocol) emissions from the Proposed Development and therefore its potential contribution to the cause of climate change. This can be summarised as follows:

(i) Applicants should provide an assessment of the carbon (GHG) impacts together with a comparison against the Government's carbon budgets.

(ii) The Government has a national carbon reduction strategy and targets to which it is legally bound to meet. An increase in carbon (GHG) emissions from the Proposed Development is therefore not a reason to warrant refusal unless it can be demonstrated that this would jeopardise the ability of the Government to meet its carbon targets.

(iii) The applicant should demonstrate evidence of appropriate mitigation in both design and construction which should ensure the carbon footprint is not unnecessarily high.

20.5 Climate Change Mitigation and Adaptation is assessed in two distinct sections in the PEIR in Chapter 23 supported by appendices. It considers the anticipated GHG emission effects as a result of the Proposed Development and the measures taken to mitigate and adapt to climate change impacts during construction, operation and decommissioning. The methodology has developed in accordance with the following key documents together with the application of Professional Judgement.

- The NPS for National Networks
- The EIA (2017) Regulations and the requirement to consider the impact of the project on climate and the vulnerability of the project to climate change
- Best Practice Guidance: *IEMA Environmental Impact Assessment Guide to: Climate Change Resilience and Adaptation*
- Best Practice Guidance: IEMA *Environmental Impact Assessment Guide to: Assessing Greenhouse Gas Emissions and Evaluating their Significance*
- The Greenhouse Gas (GHG) Protocol.

Climate Change Mitigation: (Greenhouse Gas Emissions)

20.6 It is recognised that population and economic growth is directly linked to the consumption of fossil fuels and natural resources which has resulted in the emission of a range of GHG which, in turn, is resulting in global climate change. There is an international and national response to the dangers posed by climate change through a commitment to decarbonise the global economy through a range of measures specific to each country.

20.7 The UK has committed to a legally binding carbon reduction target by 2050 of 80% of emissions relative to a 1990 baseline. This is to be secured by a series of four year carbon budgets which set progressively lower carbon emission 'budgets' against which specific sectors must collectively seek to reduce emissions. Paragraph 5.17 of the NPS requires an assessment of the applicants GHG emissions against these carbon budgets to determine if the project may prevent the Government from achieving the necessary reductions.

20.8 The carbon budgets inherently recognise that GHG emissions will occur in line with expansion of the population and economy with a significant proportion of GHG emissions reductions occurring from the decarbonisation of the UK's energy supply. This, in turn, will result in reduced emissions from the built environment as a result of energy consumption.

20.9 The Proposed Development will result in GHG emissions as a result of the following activities:

- At the existing site, as a result of the current use of the site for agricultural purposes.

- During the construction phase, due to the combustion of fuels in construction plant and vehicles, indirectly through the consumption of electricity, in the processing of materials and manufacture of products, in the transportation of materials and resources, and the transportation of waste and treatment of water consumed in site activities.

- During the operational phase, due to the combustion of fuels and from fugitive releases of refrigerant gases , indirectly from the consumption of electricity in buildings, from the combustion of fuel in employees vehicles and the transport of goods.

- During the operation of the SRFI it will have a displacement impact, encouraging modal shift from the road network to rail. The therefore includes an assessment of these GHG savings.

Treatment of Freight

20.10 An analysis by MDS Transmodal (Appendix F (Table 2) of Appendix 23.2 to the PEIR) estimates that the operational SRFI will result in a reduction of annual HGV-km travelled of approximately 20% when compared to a road only scenario.

20.11 In order to calculate how this modal shift may result in GHG savings relative to the baseline, an assessment of future emissions from road and rail freight (assuming decarbonisation continues to occur) has been undertaken. Using current (2017) emission factors, and taking into account both direct and indirect emissions, it is estimated that rail freight produces around 0.04kg CO2e per tonne.km and road freight (assuming rail displaces long-haul journeys in >33t articulated HGVs) produces around 0.1kg CO2e per tonne.km. This is a circa 60% reduction (compared to the 70% identified by the NPS). It is anticipated that rail movements of 901,792 thousand tonne.km at the SRFI will displace circa 654,970 thousand tonne.km of road freight, which results in emissions of 65,399 tCO_2e per annum by road, compared with 50,898 tCO_2e by rail, equivalent to a 22% reduction in GHG emissions as a result of modal shift from road to rail from the operational SRFI. Future rail and road emission factors based on expected levels of decarbonisation across both rail and road, indicate that by 2028, road emissions from the SRFI will have reduced to 54,028 tCO_2e per annum and rail emissions will have reduced to 30,842 tCO_2e per annum; this is a 43% reduction. By 2038, further reductions could result in 47,889 tCO_2e per annum by road and 19,580 tCO_2e per annum by rail; this is a 59% reduction.

20.12 The GHG assessment (see PEIR Chapter 23 and Appendix 23.1) has calculated emissions for the following periods:

- During construction (2019 - 2028)
- Short-term operation (2029 - 2038)
- Long-term operation (2039 - 2089)

20.13 The assessment has considered these periods relative to the current and future baselines. For context and to aid the assessment, the GHG emissions have been qualitatively compared to the relevant carbon budgets.

Total GHG emissions per Carbon Budget Period

Period	GHG Emissions [million tonnes CO_2e]
1st carbon budget (2008 – 2012)	3,018
2nd carbon budget (2013 – 2017)	2,782
3rd carbon budget (2018 – 2022)	2,544
4th carbon budget (2023 – 2027)	1,950
5th carbon budget (2028 – 2032)	1,725
6th carbon budget (2033 – 2037)	1,491
7th carbon budget (2038 – 2042)	1.255
8th carbon budget (2043 – 2047)	1,019
9th carbon budget (2048 – 2050)	468

Embedded Mitigation

20.14 For the purpose of the assessment, embedded mitigation has included the principles set out in the Construction Environmental Management Plan (CEMP). Relevant to this assessment, this includes:

- compliance with principles of waste management and Site Waste Management Plan;
- all construction contractors will follow an Environmental Management System (EMS);
- appropriate management of excavated soils; and
- appropriate training of staff and contractors.

20.15 Expected reductions in the GHG emissions associated with fuels and electricity consumed in the construction and operation of the Proposed Development are also assumed as embedded mitigation.

Current and Future Baseline GHG Emissions

20.16 Although the site is agricultural in use, GHG emissions still occur and in order to compare the GHG emissions from the construction and operational phase, the baseline emissions were estimated for the periods of construction (29,338 tCO2e) and operation (58,448 tCO2e) of the Proposed Development.

20.17 For context, and in the absence of any development on site, these baseline emissions currently account for 0.00058% of the total carbon budget for the period. By 2028 (end of the construction period), with no emission reductions other than those as a result of external factors, annual baseline emissions would contribute 0.00085%; by 2038, this increases to 0.00116% and by 2050, 0.00186% of each carbon budget period.

Construction Phase Emissions (2019 -2028)

20.18 The GHG assessment has calculated the GHG emissions from the construction phase construction of the Proposed Development are 303,003 tCO2e. The Construction Phase

Construction emissions represent 0.007% of the cumulative carbon budget over the corresponding period, compared with the 0.00068% contribution made by the cumulative baseline. As there is a net increase in emissions over the current site baseline, it is considered that there is a minor adverse effect on climate change from the construction phase GHG emissions.

20.19 During the construction phase, elements of the SRFI become operational and modal shift begins to occur resulting in a reduction in GHG emissions as freight is moved from road to rail.

20.20 The total construction phase operational emissions are -1028 tCO_2e, equivalent to 0.00002% of the cumulative carbon budget for the comparable period, compared with 0.00067% from the cumulative baseline. As there is a net reduction in emissions over the site baseline, construction phase operational emissions are deemed to have a **minor beneficial** effect on climate change in the short-term operational phase

Short Term Operational Phase Effects (2029 -2038)

20.21 During the short-term operational phase of development, the SRFI will result in a reduction in GHG emissions of -122,075 tCO_2e, equivalent to 0.00391% of the cumulative carbon budget for the period. This compares with an increase in GHG emissions equivalent to 0.00093% of the cumulative carbon budget for the period that the cumulative baseline would have otherwise contributed.

20.22 Whilst the operation of the SRFI results in GHG emissions, it is estimated that greater emission savings will occur as result of modal shift from road to rail resulting in an overall reduction in GHG emissions.

20.23 As there is a net reduction in emissions over the current site baseline, short-term operational emissions are deemed to have a **minor beneficial** effect on climate change in the short-term operational phase.

Long-term Operational Phase Effects (2039 – 2088)

20.24 A quantitative assessment of emissions beyond 2038 has not been made as there is considerable uncertainty and an absence of reliable data around future operational trends, technologies and innovations, energy supplies and emission factors. Qualitatively, professional judgement suggests that emissions post-2038 will reduce significantly; indeed, this will be necessary to meet the UK's legally binding targets set for GHG emission reductions by 2050.

20.25 Although the GHG emissions have not been calculated within the Long-term operational phase, a 'worst case' assessment has been undertaken whereby GHG emissions have been calculated assuming that there will be no further reductions in annual emissions post 2039. Between 2039 and 2050, a GHG emissions reduction of -205,131 tCO_2e is equivalent to 0.00824% of the cumulative carbon budget for the period, compared with 0.0014% that the cumulative baseline would have otherwise have contributed. As a result, the cumulative significance of effect into the long-term operational phase will continue to reduce and has the potential to deliver a **minor**

beneficial effect over time. Between 2051 and 2088, the GHG emissions are estimated at -649,581 tCO_2e.

20.26 In accordance with Paragraph 5.17 of the NPS NN, the table below presents the combined construction and operational phase emissions over the construction, short-term operational and long-term operational phases, net of baseline emissions, in comparison with carbon budget emissions over the same periods.

Cumulative Emissions and comparison with Carbon Budgets

Cumulative Emissions	2019 - 2028	2019 -2038	2019 - 2050	2019 - 2088
Carbon budget [million tCO_2e]	4,378	7,500	9,991	N/A
Baseline Emissions [tCO_2e]	29,338	58,448	53,109	116,175
Proposed Development Emissions [tCO_2e]	304,031	181,956	-23,175	-544,437
Net Proposed Development Emissions [tCO_2e]	**247,693**	**123,508**	**-116,488**	**-660,613**
Baseline emissions as % of CB	0.00067%	0.00078%	0.00093%	N/A
Proposed Development emissions as % of CB	0.00694%	0.00243%	-0.00023%	N/A
Net emissions as % of CB	0.00063%	0.00016%	-0.00012%	N/A

20.27 By the end of the construction phase (2028), cumulative emissions from the Proposed Development equate to 0.00694% of the carbon budget, reducing to 0.00063% when baseline emissions are displaced.

20.28 By the end of the short-term operational phase (2038), cumulative emissions from the Proposed Development equate to 0.00243% of the carbon budget, reducing to 0.00016% when baseline emissions are displaced. This is still a net increase in emissions, but by an increasingly reduced quantity as the impact of GHG emissions from the construction phase become proportionally less significant by 2050, and the point at which the UK is legally required to have reached an 80% reduction in emissions compared with the 1990 baseline, cumulative emissions from the Proposed Development are estimated to generate a saving over the baseline of 23,175 tCO_2e, thereby contributing to a reduction in the Government's carbon budget.

20.29 By the end of the long-term operational phase (2088), cumulative emissions from the Proposed Development could potentially result in a reduction of circa 544,437 tCO_2e compared with the baseline, resulting in a net saving of 660,613 tCO_2e.

Decommissioning Phase Effects

20.30 Predicting the baseline so far into the future to enable a meaningful assessment of the sensitivity of the environment, and the significance of effects from the decommissioning of the Proposed Development upon GHG emissions is considered disproportionate to the nature of project given the highly variable nature of the assumptions that would be necessary.

20.31 However, applying current assumptions and taking account of both the emissions generated during the decommissioning process and current reuse/ recovery/ recycling trends, there is likely to be a small net reduction in emissions of 1,895 tCO_2e

20.32 As there is a further reduction in emissions during the decommissioning phase end-of-life emissions are deemed to have a **minor beneficial** effect on climate change.

Cumulative Effects

20.33 All relevant GHG emissions associated with other PEIR topics have been considered and no additional intra-project effects are considered likely. The impact of global emissions is considered in the adaptation section below. Therefore there is no need to assess any intra-project cumulative effects.

Cumulative Effects: Inter-Project Effects

20.34 The GHG emissions presented are based on circumstances specific to the Proposed Development. Whilst external factors could have an impact on the quantity of estimated emissions, reasonable endeavours have been taken to ensure that likely scenarios are taken into account. For example, in projections of future emission factors. Beyond this, there are no specific projects identified that are likely to have an inter-project effect on the quantity of GHG emissions. Central estimates of the effects of climate change are presented as part of the adaptation section of this Chapter, and no further assessment of cumulative effects is considered necessary.

Mitigation

20.35 The assessment of the operational impacts of the Proposed Development upon climate change reveals a minor beneficial effect. However, further mitigation measures have been considered on the basis that any further reductions in GHG emissions can only be beneficial. Paragraph 5.19 of the NPS also requires appropriate mitigation to ensure the carbon footprint is not 'unnecessarily high'.

20.36 It is acknowledged, however, that many of the adaptive mitigation measures proposed are only applicable during the detailed design phase of the Proposed Development and that legislation (such as Building Regulations) and technology are likely to change over time which can result in further reductions in GHG emissions. It is therefore considered more appropriate to ensure the mechanisms and procedures are in place to seek GHG emissions reductions as opposed to defining specific targets or technologies at this stage.

20.37 The additional adaptive mitigation measures proposed are:

- Construction – the CEMP to manage and reduce beyond best practice; further development of life-cycle assessment for all materials; a resource efficiency target in line with BREEAM for less waste.

- Operation – target reductions via sustainable design measures for buildings above Building Regulations.

20.38 It is estimated that a reduction in construction emissions could be achieved following the adaptive mitigation measures identified. Total construction emissions following mitigation are estimated to be 258,847 tCO_2e.

20.39 With the adaptive mitigation measures proposed, total operational emissions could be reduced to 948,863 tCO_2e, resulting in a further 2% reduction in operational emissions over the period 2019 - 2038.

20.40 With the adaptive mitigation measures proposed the following residual effects have been identified.

Residual Effects following Adaptive Mitigation Measures

Description of impact	Significance of effect	Possible mitigation measures	Residual effect
Construction			
Quantity of GHG emissions	Minor adverse	Identified in Table 23.18 of the PEIR	Minor adverse
Operation			
Quantity of GHG emissions	Minor beneficial	Identified in Table 23.18 of the PEIR	Minor beneficial
Combined Construction & Operation			
Quantity of GHG emissions	Minor adverse	Identified in Table 23.18 of the PEIR	Minor beneficial

20.41 It can therefore be seen that the Proposed Development will not result in any significant environmental effects with regard to GHG emissions and their impact upon climate change.

20.42 Furthermore the assessment demonstrates that reductions in GHG emissions during the operation of the Proposed Development are anticipated as a result of modal shift from road to rail.

20.43 A comparison of the GHG emissions from the Proposed Development against the UKs current and anticipated future carbon budgets indicate that by 2050 the Proposed Development will make a positive contribution to the achievement of this budget and is therefore fully in compliance with the requirements of Paragraphs 5.17-5.19 of the NPS.

Climate Change Adaptation

20.44 The Proposed Development has been assessed to consider how it may be affected in the future by climate change and what measures may be needed to improve resilience. Chapter 23 of the PEIR presents the results of this assessment and is supported by a Climate Change Risk Assessment within Appendix 23.3.

20.45 This risk assessment has considered the potential risks posed to the development from changes to the UK Climate based on an assessment of the UK Climate Change Risk Assessments and relevant guidance associated with elements of the Proposed Development.

20.46 In accordance with the requirements of the NPS (Paragraph 4.41), the UKCP09 dataset for East Midlands for the 2020s, 2050s and 2080s for the high emissions scenario has been used to establish the future climatic factors with which to assess the Proposed Development.

20.47 Qualitatively the future climate of the project location at 2050 and with increasing variability up to 2080 may include the following which have been used as the basis for the assessment:

- An increase in annual average temperature by 3.6 degrees in winter and 4.4 degrees in summer;
- More very hot days particularly in long term operation with an increase in daily maximum temperature of 6 degrees;
- More intense downpours of rain;
- Increase in winter rainfall with reduced snowfall and winter rainfall increasing by 25%;
- An increase in dry spells particularly in summer months with summer rainfall dropping by 25%.

20.48 A number of embedded mitigation measures have been included within the Proposed Development and which have been considered in the PEIR:

- The Main SRFI site Parameters Plan – which shows surface water drainage attenuation sized for a 1 in 200 year storm with a 40% allowance for climate change;
- The draft Construction Environmental Management Plan (CEMP) – which includes construction compound(s) with separators, silt traps and drainage; surface water drainage during construction; health and well-being measures for workers; dust management plan; protection to controlled waters and water efficiency measures.

Construction Stage Effects

20.49 The assessment has concluded that after the initial assessment the only significant environmental effect to the Proposed Development from future climate change is the risk posed to infrastructure and foundations of the buildings and associated road and rail infrastructure as a result of increased winter rainfall and summer temperatures.

20.50 Adaptive mitigation has been proposed which will ensure that at the point of detailed design the use of best practice design and construction practices in line with relevant guidance including consideration of climate change.

20.51 With this mitigation in place no residual impacts are anticipated during the construction phase as a result of future climate change.

Operational Stage Effects

Main SRFI Site

20.52 The assessment of future climate change upon the operational stage of the Main SRFI site has identified the following significant environmental effects:

- An Increase in summer and winter temperatures and changes in rainfall – The increase in temperatures and changes in rainfall are anticipated to lead to greater swings in ground conditions through summer and winter which can lead to ground movement impacting on the Main SRFI site infrastructure foundations. Given the potential for structural damage this is therefore considered to have a moderate significant negative effect.

- Increase in summer mean and daily maximum temperature - The increase in summer mean and daily maximum temperature may result in an increased need for cooling which could increase energy use and therefore GHG emissions.

- Increased winter rainfall – The impact of increased winter rainfall may lead to an increase in surface water flood risk to buildings and infrastructure as well as potentially impacting on road conditions.

- Reduced summer rainfall – The impact of reduced summer rainfall may affect local and national water supplies. As the East Midlands are in an area of moderate water stress this could impact on the operation of site and potentially contribute to water shortages.

20.53 As a result of the above effects, the following adaptive mitigation is proposed:

- Use of best practice design and construction practices for the construction of foundations in line with relevant guidance including consideration of climate change.

- The application of the cooling hierarchy during detailed design to ensure the building cooling systems meets the projected temperature increase.

- The use of SuDS to reduce the risk of surface water flooding as set out in the Hydrology Chapter of the PEIR.

- Provision of measures to reduce water use in the operation of the buildings, by targeting water efficiency targets and the development of a plan to utilise rainwater for irrigation if possible.

20.54 With the adaptive mitigation measures proposed above it is considered that there are no significant residual environmental effects and the Proposed Development has sufficient resilience to the projected future impacts of climate change.

J15a and Other Minor Highway Works

20.55 The assessment of future climate change upon the operations stage of the J15a and Other Minor Highway Works has identified the following significant environmental impacts

- An increase in summer and winter temperatures and changes in rainfall may lead to greater swings in ground conditions through summer and winter which can lead to ground movement impacting on the road and infrastructure foundations.

- An Increase in winter rainfall may lead to an increase in surface water run-off and surface water flood risk which could impact on road conditions.

20.56 In response to the above impacts, the following adaptive mitigation measures have been proposed:

- Use of best practice design and construction practices for the construction of foundations in line with relevant guidance including consideration of climate change.

- Measures incorporated into the design of road elements and SuDS systems to mitigate the impact of surface water flood risk and drainage taking into account the future impacts of climate change.

20.57 With the proposed adaptive mitigation measures there are no significant residual environmental effects and it is considered that the Proposed Development has sufficient resilience to the projected future impacts of climate change.

Decommissioning Effects

20.58 Decommissioning includes all works and processes required to undertake the closure, dismantling and removal of the Proposed Development. At this stage the operational lifespan is unknown, but the design life of the proposed buildings will be in the order of 60+ years and the rail infrastructure significantly longer. At present the impacts of climate change upon the operational phase have been assessed against a 2080 future baseline which is the only point at which UKCP09 data is available. With no climate change data available beyond circa 60 years and no clear time when decommissioning of the Proposed Development will occur, this has been scoped out of the assessment.

Cumulative Effects

20.59 There are a number of noticeable interactions between the future effects of climate change and other PEIR topics. A summary is provided below, highlighting where climate change is anticipated to have an effect:

- **Air Quality-** It is anticipated that the effects of climate change, in particular increased summer temperatures could increase dust emissions during construction. In this context the CEMP has been updated to ensure mitigation measures will be put in place to minimise this risk.

- **Ground Conditions –** The impacts of climate change have the potential to affect ground conditions potentially affecting the foundations of infrastructure and buildings. The use of best practice design will mitigate the impacts of climate change and ground movement.

- **Hydrology, Drainage and Flood Risk –** The impacts of climate change including increased winter rainfall have the potential to increase the risk of surface water run-off and flooding. Details of appropriate mitigation have been confirmed to minimise the risk of surface water flooding for all components of the development including an allowance for future climate change.

- **Utilities –** The assessment of operational effects notes the potential for increased temperatures to impact on the performance and/or damage on-site electrical equipment. The onsite infrastructure will be designed in accordance with best practice and regularly maintained. Where appropriate measures will be put in place to protect the system from changes in future climate.

- **Biodiversity –** Climate change may involve increases in average temperatures, winter rainfall, summer drought, and extreme weather events, amounting to an increase in the Continental character of the climate. Because the biota of the site already lives under the relatively Continental climate of eastern England, there is less risk of adverse impact upon species than there might be elsewhere in Britain. Both positive and negative effects can be envisaged, and the net effect is unlikely to be significant. The green infrastructure plan will enhance the resilience of the development to climate change by avoiding species that are invasive in warmer climates and by enhancing biodiversity to the extent that net gains should remain even after the impact of any species losses due to climate change.

- **Lighting –** Given the nature of the Proposed Development it is considered climate change will have no impact in relation to Lighting, albeit the use of LED lighting is noted as a potential measure for reducing energy use and GHG emissions.

Inter-project cumulative effects

20.60 The effects of climate change predominantly impact on the development rather than the development impacting on climate change with the exception of GHG emissions. However, indirectly there is a risk associated with surface water runoff, as noted above measures in the Proposed Development aim to reduce surface water runoff as there is an increased risk of flooding due to an increase in winter rainfall associated with climate change.

20.61 In combination with related cumulative development, i.e. the Northampton Gateway, there is the potential for a greater increased risk of surface water flooding with both sites. However, the measures put in place to limit this risk are regulatory and therefore the Northampton Gateway development will need to include similar measures. No inter-project cumulative effects are anticipated on the basis that the adaptation effects and impacts are specific to this particular development and will not result in any additional impacts to neighbouring development.

Conclusions (Climate Change Mitigation and Adaptation)

20.62 Based on the requirements of the NPS and utilising the latest technical guidance in combination with professional judgement, a robust assessment of the impacts of, and contribution to, future climate change from the Proposed Development has been undertaken.

20.63 In compliance with Paragraphs 5.17-5.19 of the NPS, the assessment has concluded that there are no significant adverse effects upon climate change mitigation and indeed the total GHG emissions from the different Phases of the Proposed Development are of such a small scale relative to the Carbon Budgets that the Proposed Development does not impact upon the Government's ability to meet its carbon budgets.

20.64 Based on current 2017 emission factors, it is estimated that the operation of the SRFI results in a 22% reduction in GHG emissions as a result of modal shift from road to rail. Furthermore, it is estimated that by 2050, the operation of the SRFI may lead to an overall reduction in GHG emissions as a result of modal shift from road to rail and with due consideration to the potential future effects of decarbonisation of the economy and transportation network.

20.65 A Climate Change Risk Assessment has been prepared to demonstrate the scale of climate variation anticipated and associated risks over the construction and operational phases of the Proposed Development. This process identified a small number of significant environmental effects which warranted further adaptive mitigation.

20.66 Following the application of the adaptive mitigation measures it is concluded that there are no significant environmental effects upon the Proposed Development associated with the future impacts of climate change. It can therefore be concluded that the Proposed Development has a high resilience to the future effects of climate change and has robustly addressed the requirements of Paragraphs 4.36-4.47 of the NPS.

21. Socio-Economic Impacts

21.1 The NPS recognises the significant role of the national rail network in supporting economic growth and sustaining existing economic activity and productivity, and the need to further develop national networks to meet the country's long-term needs and both stimulate and support economic growth.

21.2 The increasingly significant role of rail freight in logistics is recognised as an important driver of economic growth. The considerable local economic benefits that SRFIs can provide are acknowledged, with the labour-intensive nature of major distribution centres creating many new job opportunities.

21.3 The NPS recognises that there is a critical need to improve the national networks to address road congestion and crowding on the railways to provide safe, expeditious and resilient networks that better support social and economic activity; and to provide a transport network that is capable of stimulating and supporting economic growth (paragraph 2.2).

21.4 As set out at NPS paragraph 2.29:

> *"In the context of the Government's vision for the transport system as a driver of economic growth and social development, the railway must:*
>
> - *offer a safe and reliable route to work;*
> - *facilitate increases in both business and leisure travel;*
> - *support regional and local public transport to connect communities with public services, with workplaces and with each other, and*
> - *provide for the transport of freight across the country, and to and from ports, in order to help meet environmental goals and improve quality of life".*

21.5 The NPS identifies that rail freight plays an increasingly significant role in logistics and has become an important driver of economic growth. It highlights that there is an increasing need for SRFI due to the changing needs of the logistics sector, the high levels of forecast growth in rail freight to reduce the dependence on road haulage to serve the major markets and finally due to the considerable local economic benefits that SRFIs can provide. The NPS states that:

> *"… because many of the on-site functions of major distribution operations are relatively labour-intensive this can create many new job opportunities and contribute to the enhancement of people's skills and use of technology, with wider longer term benefits to the economy…"* (Para 2.52)

21.6 The NPS also states that the ExA and SoS when considering any Proposed Development should:

'take into account its potential benefits, including the facilitation of economic development, including job creation, housing and environmental improvement, and any long term or wider developments.' (paragraph 4.3)

21.7 National, regional and local levels should be considered.

21.8 A socio-economic assessment forms Chapter 20 of the PEIR. This includes the identification and assessment of likely direct and indirect effects relating to employment, labour force, productivity, crime and business rate revenue.

21.9 It is recognised that the Main SRFI Site could generate broader socio-economic effects resulting from the movement of road-based freight to rail; such effects are challenging to quantify but are likely to benefit the national economy.

21.10 Socio-economic effects may also be generated by works at J15a and other highways works, which are considered within this chapter where possible. These effects are expected to be primarily generated during construction, with significant socio-economic effects unlikely to be generated by these works once constructed and operational. However, the costs associated with works at J15a and other highways works are not presently known, and therefore insufficient detail currently exists to fully assess the socio-economic effects generated during their construction.

21.11 Socio-economic effects have been assessed at various spatial scales, based on an understanding of relevant local and wider economic geographies and the extent to which socio-economic effects are likely to be contained within these geographies. For the purposes of the assessment, socio-economic effects are established within the following study areas: South Northamptonshire; Coventry, Daventry, Milton Keynes, Northampton, South Northamptonshire and Wellingborough; and England.

21.12 Within these study areas, the construction of the Main SRFI Site is likely to generate significant socio-economic effects which are beneficial in nature, resulting from the creation of jobs and increase in productivity in the local economy. There is therefore no requirement to mitigate significant adverse socio-economic effects arising during construction.

21.13 Once completed, operational and occupied, significant beneficial effects relating to jobs, productivity and business rate revenue are likely to be generated. However, an adverse effect relating to skills may be generated, based on an assessment of the alignment between the skills profile of the local and wider population and the skills required to occupy positions created at the Main SRFI Site. This effect can be mitigated through a commitment to working with local and regional training and education providers, which is envisaged to be agreed between the applicant and relevant bodies by the point of submission. Measures to reduce incidences of crime are also embedded through design, mitigating any potential adverse effect.

Cumulative

21.14 Of the projects identified within this assessment, several are expected to be primarily residential in nature, with only small scale employment effects generated. The provision of housing at these sites – in combination with employment cumulatively

generated by the Proposed Development and other employment-generating projects – can be expected to positively contribute towards accommodating the additional labour force required to support employment.

21.15 In terms of labour force and skills, the workforce of the local and wider impact areas has capacity to adapt to change. This is linked to the increase in the labour force that will occur as new homes are delivered as well as enhancements to the skills base of residents associated with delivery of planned skills and training initiatives. The cumulative projects have also been reviewed and found to incorporate measures in relation to skills and training provision which will also contribute to workforce skills and suitability. The magnitude of the cumulative effect on skills will be greater than that of the Proposed Development in isolation, but will not generate a significant effect.

Monitoring

21.16 The applicant is committed to investing in training and skills development. As part of the proposed Local Employment Scheme the frequency of monitoring and selection of Key Performance Indicators will be agreed with South Northamptonshire Council. Beyond this, it is not anticipated that any socio-economic monitoring procedures are necessary.

Conclusions (Socio-Economics)

21.17 The assessment has been undertaken in accordance with NPS objectives and with social, economic and environmental considerations in mind.

21.18 The assessment has considered the socio-economic effects generated by investment in the construction of the Proposed Development and the effects resulting from its operation once completed. This has included the identification and assessment of likely direct and indirect effects relating to employment, labour force, productivity, crime and business rate revenue.

21.19 Within the identified Impact Areas it is envisaged that construction of the Proposed Development is likely to generate **significant socio-economic effects which are beneficial in nature**, resulting from the creation of jobs and increase in productivity in the local economy. There are therefore no significant adverse socio-economic effects arising during construction which require mitigation.

21.20 Once completed, operational and fully occupied, **significant beneficial effects** relating to jobs, productivity and business rate revenue are likely to be generated. No significant adverse effects are identified through the assessment, which takes account of the labour force growth facilitated by planned new housing growth across the wider area as well as embedded measures relating to employment, skills and training. Measures to reduce incidences of crime are also embedded through design, mitigating any potential adverse effect.

21.21 The Proposed Development is in accordance with the NPS by supporting social and economic activity and by stimulating and supporting economic growth (paragraph 2.2).

22. Health and Wellbeing

22.1 SRFIs have the potential to affect the health, wellbeing and quality of life of the population (NPS paragraph 4.79). This includes consideration of direct impacts on health, such as from traffic and noise, for example, but also indirect impacts, such as access to services and opportunities for physical activity.

22.2 The NPS states (paragraph 3.2) that the Government recognises that for development of the national road and rail networks to be sustainable these should be designed to minimise social and environmental impacts and improve quality of life.

22.3 The technical chapters of the PEIR assess a range of relevant health considerations, and Chapter 24 specifically considers health and wellbeing. The assessment of health takes a holistic approach that considers 'traditional' impacts relating to air quality, noise and vibration and transport, but that also looks more widely to consider broader socio-economic factors. The assessment provided in Chapter 24 of the PEIR is an overview; further assessment is likely to be undertaken to support the DCO submission.

Mitigation

22.4 Health mitigation has been embedded into the project design. This includes removing or managing known hazards where possible, such that they are either designed out, or manged to the point that they do not present a significant risk to occupational or public health. Further, provision of strategic landscaping and open space, including alterations to public rights of way, and more specifically the creation of new ecological enhancement areas and publicly accessible open areas, will support public health and wellbeing.

22.5 Mitigation intended to address any residual hazards are addressed within each of the PEIR technical chapters. The provision of further mitigation, such as a dedicated construction management plan, will set out best practice methods to mitigate against any residual adverse effects to the environment and community health.

22.6 While no further health hazard mitigation is required, opportunities to support health benefit uptake have been requested by the Northamptonshire County Council Public Health Team.

22.7 The construction of the Proposed Development provides an opportunity to encourage, support and promote healthier lifestyles within the workforce.

22.8 A dedicated Healthy Workplace Features Plan will be provided as a standalone document, and is intended to address the following:

- the incorporation of healthy workplace features which will be put in place to support a healthy and vibrant workforce; and
- manage any concern over impact on local health care provision.

22.9 Prior to mitigation, the construction and operation of the Proposed Development is not anticipated to constitute a risk to public health. The recommendations in the Healthy Workplace Features Plan shall be geared towards health improvement and not hazard management. As such, while the Healthy Workplace Features Plan will support the delivery of local health improvement objectives, it will not materially alter the management of hazards or residual effects. The residual impact to population and health will therefore remain 'not significant'.

Monitoring

22.10 As air quality and noise levels will be monitored to ensure that they remain within objective thresholds set to be protective of the environment and health, no additional health-specific monitoring is considered necessary during the construction or operational phase.

Conclusions (Health and Wellbeing)

22.11 In accordance with paragraphs 3.2 and 4.79 of the NPS the Proposed Development recognises that for an SRFI to be sustainable, it should be designed to minimise social and environmental impacts and improve quality of life. The assessments undertaken include consideration of direct impacts on health, such as from traffic and noise, for example, but also indirect impacts, such as access to services and opportunities for physical activity.

22.12 Health and wellbeing has been embedded into the project design. Notwithstanding that there are no significant residual effects expected in relation to this topic, further consideration will be given to supporting and promoting a healthy workforce and to local health care provision as part of the final DCO submission.

23. Waste Management

23.1 The NPS sets out that large infrastructure projects may generate hazardous and non-hazardous waste during both their construction and operational phases. The NPS refers to the implementation of sustainable waste management through the principles of the waste hierarchy and advises that the applicant should set out the arrangements for managing any waste that is produced (NPS paragraphs 5.40 to 41).

23.2 An assessment of waste is provided at Chapter 23 of the PEIR.

23.3 The Proposed Development has the potential to generate waste material during its construction, operation and ultimately its decommissioning, which may require special handling, storage, treatment, transportation and management or disposal. These activities have the potential to affect people living close to and working on the Proposed Development, as well as the waste management industry whose capacity to accept waste would be required. The waste assessment focuses on the potential direct effects on waste management infrastructure that waste generation from the development might have. The indirect effects of waste generation from the project, on human health, via air quality or excavation of land affected by contamination and effects on the transportation network (for example) are assessed within the respective technical assessments of the PEIR.

23.4 The initial stage of the waste assessment identified the relevant waste legislation and policy framework to set the standards by which the waste produced by the Proposed Development should be managed. The key element of waste policy is for waste management to operate at the highest level of the waste hierarchy as possible.

23.5 The baseline for the assessment is the extent and capacity of the waste management infrastructure of the surrounding area. Information regarding waste management capacity has been sourced from the Environment Agency and LPAs, including data in the form of a needs assessment for future waste management infrastructure as a result of the Councils' own waste forecasting.

23.6 The assessment identifies the significant waste streams that result from the various phases of the development.

Construction

23.7 As part of the construction phase, waste will be generated as a result of a number of specific activities such as site clearance and excavation but also as a result of generic construction waste from on-site personnel and from building materials waste.

23.8 Generic construction waste has been estimated using benchmarking data based on type and extent of the proposed land use classes within the development. However with respect to excavation data, the proposed design is such that excavated material will be used for fill material elsewhere within the confines of the development where possible, with the result that surplus material is not planned as requiring offsite management.

23.9 A Site Waste Management Plan would provide mitigation measures to minimise and manage all construction wastes. Therefore, all construction waste has been planned to be managed at the highest level of the waste hierarchy achievable.

23.10 Based on a review undertaken within the assessment, when construction waste is removed from site, there are considered to be sufficient facilities within the local area and region to recycle, recover or dispose of it.

Operation

23.11 The assessment of the effects of the Proposed Development with respect to operational waste has determined what significant changes to current waste arisings are anticipated as a result of the development, and proposes mitigation measures and assesses the regional capacity for handling the likely operational waste streams.

23.12 Operational waste associated with the proposed land use at the site has been estimated through a benchmarking exercise undertaken with British Standards documentation. Much of the anticipated waste generated is likely to be similar in composition to Municipal Solid Waste, which is a non-hazardous waste stream. Based on the volumes and anticipated regional waste capacity available to deal with this type of waste stream, the effects of this operational waste generated from the Project have been assessed as minor adverse to negligible.

23.13 In terms of mitigation, sustainable waste management practices can be secured to reduce the amount of waste generated and the significance of any effects from its disposal.

Decommissioning

23.14 When and if the development is decommissioned, the appropriate environmental assessments will be undertaken to identify any significant environmental effects and propose suitable mitigation methods. Notwithstanding this, it is likely that the effects will be similar to those experienced during the construction phase assuming similar mitigation methods are employed and with appropriate or improved waste management facilities available.

Cumulative

23.15 Potential cumulative effects from construction waste generated by surrounding projects have been assessed as not significant based on the local waste management authority forecasting no growth in construction waste based on anticipated improved management due to increasing costs for disposal. Further, the future calculated waste arisings for the local authority area will have included an allowance for new developments, and waste infrastructure has been planned accordingly. Finally, it has been assumed that these new schemes will be required to follow the requirements of the local and national legislation and waste planning, including the maximisation of reuse and recycling of construction wastes through site waste management plans and meeting targets for recycling of waste. Therefore, collectively, these developments are unlikely to significantly deplete the existing and planned waste capacity of Northamptonshire.

23.16 Similarly, the potential cumulative effects of operational waste from other Proposed Development sites in the region will have been accounted for in the waste forecasts and waste infrastructure planning. It is anticipated that similar mitigation measures will be required for other developments ensuring that the waste hierarchy (prevention, preparation for reuse, recycling, other recovery and disposal) and disposal to one of the nearest appropriate facilities are observed wherever practical and commercially viable. It is reasonable to conclude that other schemes would effectively mitigate the impact of their waste arising during their operation.

Monitoring

23.17 Appropriate targets will be set in relation to the minimisation and recycling of any construction waste materials. Suitable material specific targets for recovery (re-use or recycling) can then be set.

23.18 Setting of on-site waste targets for the Proposed Development should be included within agreements with the proposed Principal Contractor. A suitable programme of monitoring of these targets should also be put in place to:

- Quantify raw material wastage;
- Quantify the generation of each waste stream;
- Record any improvements in current working practices;
- Record the methods by which the waste streams are being handled and stored; and
- Record the available waste disposal routes used.

23.19 Specific waste quantification and monitoring will be undertaken through the SWMP.

23.20 Monitoring of operational waste from the activities of the Main SRFI Site will be the responsibility of the individual operators. However, it is assumed that monitoring will include compliance assessment to ensure all waste generated by the individual operators is subject to appropriate management and controls as required by the relevant waste legislation and that each of the organisations are complying with their waste 'duty of care'; and, operational targets for waste minimisation, re-use or recycling.

Conclusions (Waste)

23.21 The assessment complies with the NPS by identifying the types and volume of waste generated, and setting out arrangements for managing waste, whilst minimising the volume produced and the volume sent for disposal. The assessment has also demonstrated that there is capacity in terms of existing waste management facilities.

23.22 Following the implementation of mitigation measures identified by the PEIR, there will be no significant residual effects.

23.23 Waste during construction and operation can be managed and mitigated as required, and the assessment demonstrates that the Proposed Development is in accordance with paragraphs 5.39- 5.45 of the NPS.

24. Civil and Military Aviation and Defence Interests

24.1 Civil and military aerodromes, aviation technical sites, and other types of defence interests (both onshore and offshore) can be affected by new national networks infrastructure development.

24.2 NPS paragraph 5.55 states that where Proposed Development may have an effect on civil or military aviation and/or other defence assets, an assessment of potential effects should be carried out. NPS paragraph 5.59 goes on to state that the Secretary of State should be satisfied that effects on civil and military aviation and other defence assets have been addressed by the applicant and that any necessary assessment of the proposal on aviation or defence interests has been carried out.

24.3 In the case of the Proposed Development, there are not expected to be impacts on civil and military aviation and defence interests. This topic does not form part of the PEIR.

Ministry of Defence (MOD)

24.4 The MOD generally seeks to be consulted specifically regarding offshore development, and applications for windfarms (because wind turbines can adversely affect a number of MOD operations including radars, seismological recording equipment, communications facilities, naval operations and low flying aircraft).

24.5 The MOD were consulted as part of the Scoping process and chose not to provide any response.

National Air Traffic Services (NATS)

24.6 NATS seek consultation for windfarms. The NATS self-assessment maps have been reviewed in order to confirm the Proposed Development is outside of any safeguarded or radar cover area. In such cases, NATS En-Route would not object to development should planning permission be applied for.

24.7 The Main SRFI Site does not appear to fall within any of the areas depicted by the NATS maps[59], and as such it is concluded that further assessment is unnecessary.

Civil Aviation Authority (CAA)

24.8 CAA guidance on planning consultation requirements (02 August 2012)[60] identifies typical occasions when the CAA should be consulted; for example, where a Local Planning Authority is minded to grant permission for a Proposed Development affecting an officially safeguarded civil airport, or where NATS has objected, and also in relation to wind turbines.

[59] http://www.nats.aero/services/information/wind-farms/self-assessment-maps/

[60] https://publicapps.caa.co.uk/docs/33/20120802GuidanceOnCAAPlanningConsultationRequirementsAug12Update.pdf

".. whilst the CAA has a role in providing relevant aviation safety advice upon request, aside from cases that may involve CAA property, the CAA is not routinely a statutory consultee for planning applications. When not a statutory consultee the CAA will only respond to planning enquiries where there is something definitive to contribute; where this is not the case the CAA will not respond. Please note that the CAA will not send a 'nil response' letter in return."

Unexploded Ordinance (UXO)

24.9 A non-specialist Unexploded Ordinance (UXO) screening exercise has been undertaken as part of the PEIR, which indicates a low bomb risk. This is reported in PEIR Appendix 13.1.

24.10 In general accordance with CIRIA Report C681 (Stone et al 2009) a non-specialist Unexploded Ordinance (UXO) screening exercise has been undertaken which indicates:

- no current or former military use of the area;
- no evidence of bombing (on the historical maps); and
- the Zetica regional bomb risk map (Northamptonshire) shows the site to be in an area where the bomb risk is low.

24.11 Since the Zetica assessment of UXO risk is low and no evidence to the contrary is available, no further consideration of UXO has been undertaken.

Conclusion (Civil and Military Aviation and Defence Interests)

24.12 NPS paragraph 5.55 states that where Proposed Development may have an effect on civil or military aviation and/or other defence assets, an assessment of potential effects should be carried out. In the case of the Proposed Development, there are not expected to be impacts on civil and military aviation and defence interests. This topic does not form part of the PEIR. In the event that consultees identify evidence that suggests that further assessment would be required, a proportionate assessment will be undertaken.

25. Utilities

25.1 Chapter 15 of the PEIR sets out an utility impact assessment methodology and relevant information used to perform impact analysis. The impact assessment is based on overall disruption and visual effects of utility services across the development phases (construction, operation and decommissioning).

25.2 The PEIR includes consultation with utility providers, describing the subsequent results of the impact analysis on the relevant receptor locations and assesses the associated risks and their potential impact on both the Proposed Development and surrounding area.

25.3 The outline mitigation methods applied to prevent, reduce, or offset any significant adverse effects are described, as well as the associated resulting residual effects.

25.4 The utilities assets assessed are grouped as follows:

- Electrical
- Telecoms
- Oil and Gas
- Water

Construction

25.5 The construction phase will see the diversion of existing utilities infrastructure within the proposed Order Limits, as well as the complete installation of the proposed utility works. Diversion requirements are required.

25.6 A summary of the works to be carried out for each service and the subsequent impact assessment is set out in Chapter 15 of the PEIR.

25.7 For J15a and the Minor Highway Works, it is of importance to note that, without detailed information pertaining to levels of cover and other detailed design information; buried services diversion requirements are only speculatively outlined. It is assumed that utility diversion would only be required if there was a requirement to physically widen the road carriageway or amend the road layout in some way, and not for signalisation or other safety changes. If required, it is assumed the works would take place at the same time as the rest of the roadworks and would therefore not generate any additional disturbance.

25.8 Further information on requirements will need to be sought at a detailed design stage.

Operation

25.9 The operational phase will see the general maintenance of the complete installation of the proposed utility works. It is anticipated that routine maintenance would be carried

out and some equipment may need replacing. In general, it is not expected any major works would be required during this phase.

Residual Effects

Electrical

25.10 Residual effects related to the electrical installation would include the visible above ground substations and any maintenance related works. Maintenance work could result in environmental disruption where underground services require accessing.

Telecoms

25.11 Visible connection and joint boxes, as well as maintenance works would be the residual effects of the telecoms installations.

Gas

25.12 Residual effects with regard to the National Grid installation would include the visible above ground meter housings, relevant health and safety or asset location signage and any maintenance related works; whereby workers and equipment may temporarily cause inconvenience or require access to meter housings.

Water

25.13 Residual effects with regard to the Anglian Water installation would include the visible above ground meter housings, relevant signage and any maintenance related works, whereby workers and equipment may temporarily cause inconvenience or require access to meter housings.

26. Major Accidents and Disasters

26.1 A structured risk assessment was undertaken to identify the Proposed Development's vulnerability to, and from, risks of major accidents and disasters. This assessment considered how the baseline environment (such as existing roads, utilities and rail infrastructure and natural risks such as flooding) could interact with the Proposed Development to generate a scenario where a potential major accident or natural disaster could arise.

26.2 For situations where the risk assessment identified potential risks for major accidents the embedded mitigation and management structure proposed was considered to include appropriate controls. The level of regulatory control and/or industry guidance in relation to the potential major accident situations was also considered. Where necessary, additional mitigation has been identified to reduce the accident/hazard risks to an acceptable level.

26.3 The objective of the assessment is to confirm that appropriate precautionary actions are taken, to avoid major accidents or disaster risks, which could have significant adverse effects on the environment (including people or infrastructure). The assessment identified potential risk events (including any embedded mitigation) related to utilities, rail infrastructure and the possibility that hazardous substances could be stored on site once operational. However, there are relevant embedded mitigation and risk management processes related to these potential events which reduce the risks. These include:

- Statutory compliance and adherence to common industry good practice and guidance is an appropriate minimum operational standard for the development.
- Establishment of roles, responsibilities, authorities and accountabilities in advance of the construction phase will be embedded within the construction contract performance requirements. The framework for construction phase management will be established by the code of construction practice (COCP).
- All relocation works of third party infrastructure will either be undertaken and contracted directly by the Statutory undertaker or undertaken by approved contractors to a standard appropriate for the Statutory undertaker and within the terms established by any protective provisions contained within any granted order.
- The contractors appointed to implement the construction will maintain a safe environment. Active risk management is considered to be standard industry approach as is implementing construction projects within an operational site. The framework for construction phase management will be established by the code of construction practice (COCP).
- Management of the SRFI with private rail freight train operators using the facilities (to move material on/off the rail network and for interim storage

facilities) will be undertaken to Network Rail's requirements, as regulated by The Office of Rail Regulation (ORR).

- Freight services will be provided by suitably approved and regulated Freight Operating Company (FOCs).

26.4 All operators will be required to maintain statutory compliance within the Proposed Development with controls specific to the materials they are responsible for. Therefore, should hazardous substances or those that require regulation under COMAH be stored on site, the appropriate permits, approvals and operating practices would have to be implemented by the relevant operator.

26.5 The assessment concludes that appropriate mitigation, management or regulatory controls are, or will be in place to minimise the risk of major accidents or natural disasters. As a result, it is considered that there will not be any expected significant environmental effects of the Proposed Development deriving from the vulnerability to risks of major accidents and/or disasters.

27. Cumulative Effects

27.1 Cumulative effects assessment is an iterative and ongoing process. At this stage in the project, such effects are still being identified and means of avoiding, reducing or mitigating them being developed.

27.2 Each technical chapter of the PEIR have assessed cumulative effects.

27.3 A cumulative impact assessment following the guidance produced by PINS (Advice Note 17) will be provided in the final DCO submission. Significant adverse cumulative effects will be clearly set out, with mitigation and monitoring identified to reduce significant effects. This will include an assessment of intra-project effects (considering inter-relationships between different assessment topics, and where particular receptors could be affected by several different impacts arising from the Proposed Development - for example, where separate impacts such as noise and air quality, traffic and visual impact affect a single receptor) and inter-project effects (where two or more projects in the vicinity can interact – for example, leading to an overall increase in traffic or air quality impacts).

27.4 The PEIR has at this point identified areas where potential intra-project effects could occur. These will be reviewed by the topic specialists, and potential receptors and pathways that could lead to a significant impact identified in the final submission. The final DCO submission will include a clear summary of the relevant receptors from the cumulative assessments undertaken for Chapters 9-25.

27.5 The inter-project effects will be assessed using the "tiered" approach outlined in the PINS guidance. At this stage, the "long list" of potential cumulative projects (identified through consultation with Local Planning Authorities and PINS (scoping opinion) and searching past records of relevant planning and pre-planning submissions, development plan documents and relevant development frameworks) has been partly refined by virtue of overlaps in temporal scope, the scale and nature of the other development, and the potential for cumulative effects on one or more aspects of the environment to arise. For example, sites which have been refused permission and not appealed, or which were constructed and operational prior to baseline surveys taking place were excluded. Similarly, sites purely for alteration, extension or subdivision of existing dwellings, small increases in non-residential floorspace, and planning consents that are assumed to have been implemented or expired, or construction commenced by January 2018 were excluded (or will be excluded). Information on these "short listed" sites was gathered to inform the cumulative assessment, and further consultation with the relevant Local Planning Authorities is being carried out (which will be informed by this S42 consultation process) in order that a definitive list of cumulative sites to be considered in detail can be considered.

27.6 A summary of preliminary topic assessments of these sites is included in Chapter 26. This will be expanded in the final DCO submission, with further information gathered on sites (including any environmental assessments carried out on those sites), and appropriate mitigation and monitoring identified to reduce potentially significant cumulative effects. It is anticipated that several of the sites can be excluded from the

final cumulative assessment as no potential cumulative effects have been identified even where substantial information is available.

27.7 Given the proximity of the Northampton Gateway site adjacent to the Proposed Development, a more detailed cumulative assessment has been undertaken for this site at this stage. This suggests there is potential for cumulative impacts to arise in terms of agricultural land, archaeology, built heritage, biodiversity, landscape and visual, noise and vibration and socio-economics. Effects arising on air quality (as a result of traffic) have not been confirmed. In terms of highways, the capacity assessments carried out to date demonstrate that in the vast majority of cases, the Rail Central highway mitigation proposals mitigate against the impacts of both the Rail Central and the Northampton Gateway developments. However, further work will be carried out in advance of the DCO submission to determine whether further mitigation is required in relation to M1 J15 (which is mitigated for 3 of 4 scenarios); and for M1 J15A and the A45 Barnes Meadow Interchange where the cumulative impact is not fully mitigated.

27.8 However, for most assessments, cumulative effects will be no more than negligible/ minor and not significant. Only impacts on built heritage (Milton Malsor Conservation Area and Mortimers) and Landscape and Visual (Landscape between Colingtree and Milton Malsor and Views from the adjacent Right of Way) have the potential to be significant. Mitigation proposed on the Proposed Development Site will mitigate these impacts, but by their nature they cannot be avoided. Socioeconomic cumulative impacts would likely be beneficial, on balance (assuming mitigation relating to skills in the labour force on a regional scale are addressed).

28. Overall Conclusions

28.1 The statutory framework for deciding NSIP applications where there is a relevant designated NPS is set out in s104 of the PA 2008. The Secretary of State must decide the application in accordance with any relevant NPS, with exceptions. Paragraph 4.2 of the NPS states that:

> *"Subject to the detailed policies and protections in the NPS, and the legal constraints set out in the Planning Act, there is a presumption in favour of granting development consent for national networks NSIPs that fall within the need for infrastructure established in the NPS."*

28.2 Paragraph 4.3 of the NPS states that:

> "*In considering any Proposed Development, and in particular, when weighing its adverse impacts against its benefits the ExA and the Secretary of State should take into account:*
>
> - *Its potential benefits, including the facilitation of economic development, including job creation, housing and environmental improvement, and any long-term or wider benefits;*
> - *its potential adverse impacts, including any longer term and cumulative impacts, as well as any measures to avoid, reduce or compensate for any adverse impacts."*

28.3 Our case for granting development consent for this application is set out in Chapters 9 to 27 of this statement.

The Facilitation of Economic Development, Environmental Improvement and Wider Benefits

Facilitating Economic Development & Delivering upon Government Policy

28.4 The NPS establishes a compelling need for an expanded network of SRFIs. This strong policy position was established in response to the changing needs of the logistics industry and the anticipated growth in freight traffic which will continue to fuel economic growth. All other options – including relying upon road based logistics; the existing network of SRFI or a smaller number of rail freight terminals – have been discounted on the basis that these options would result in economic growth being constrained and private sector investment and job creation stymied. National rail freight forecasting, which underpins the NPS, will not be satisfied if the need is not met.

28.5 The NPS does not set out any policy-based restriction or geographical restraint on the number of SRFI required across the Country or across specific regions to meet Government policy objectives and demand. Indeed the NPS is explicit in that there is an expectation that the market will deliver new SRFIs where they are viable. There is an emergence of new SRFI to expand the existing network and they are arising in locations

where demand is greatest and where they can significantly and strategically benefit from access to the strategic road and rail network.

28.6 The Proposed Development is well placed to contribute to the overriding Government objective of the transferal of freight from road to rail through an expanded network of SRFI and will substantial contribute to the delivery of economic growth both locally and nationally. The operation of the SRFI will contribute over £169m of South Northamptonshire's economy every year and will also generate a lasting productivity impact to the national economy, which is expected to be £555.6 million per annum.

28.7 The Proposed Development is strategically well positioned in an area which has significant competitive advantage – the heartland of logistics and distribution which displays high demand and the most optimum geographical characteristics and infrastructure to serve existing and new logistics customers and the economy. These ingredients emphasise the need to capitalise on its innate market potential. Across the region, there is a paucity of suitable SRFI locations and a critical undersupply of suitable logistics warehousing sites and floorspace. The preliminary ASA identifies the Proposed Development is one of the best performing SRFI locations across the region.

28.8 The NPS explicitly underscores the need to deliver a network of SRFI by confirming that there is a presumption in favour of granting development consent order for national networks NSIPs that fall within the need for infrastructure established in the NPS.

28.9 The Proposed Development meets the NPS requirements of locational criteria as set out in paragraph 2.56 with it being located adjacent to the M1 which serves as the key north-south motorway link in the UK and a core part of the strategic highway network and provides access to a large proportion of the population; it is also in a location which is highly accessible to serve local markets. The Proposed Development directly connects to the WCML providing direct access to the SRN enabling swift access to the rail freight network and key deep-sea ports.

28.10 The locational requirements of the NPS are therefore met.

28.11 The NPS also specifically requires SRFIs to be of specific function and size in order to deliver the scale of economies, operating efficiencies, benefits and linkages afforded by such SRFI development. The Proposed Development would be capable of handling freight trains of the optimal length (up to 775m long) with on-site infrastructure configured for optimum use to eliminate shunting and to be able to receive trains from both north and south of the rail network. The terminal would also be capable to handle four trains per day[61] from the outset with the ability to increase the number of trains handled as the development matures.

28.12 The Proposed Development is compliant with the NPS requirement (at paragraphs 4.83 and 4.88) relating to functionality. The proposed SRFI will be capable of accommodating both rail and non-rail activities. Early phases of development will also be capable of providing an operational rail connection and areas for intermodal

[61] The scale of warehousing envisaged indicates that the intermodal terminal will be able to handle up to 13 trains per day at maturity.

handling and container storage. The functional requirements of the NPS are therefore met.

28.13 The Proposed Development is also compliant with the NPS requirement (paragraph 4.88) regarding rail connected buildings. The whole development will be capable of being rail served with a significant element of warehousing (c 2.2m sqm) having the ability to be rail-connected. The Proposed Development is therefore compliant with paragraph 4.88 of the NPS regarding rail connectivity, in that from the outset, the SRFI is to be developed in a form to accommodate rail activities.

28.14 While not explicitly stated in the NPS, the Proposed Development would provide added benefits from an operational perspective. The SRFI provides full inter-connectivity between the WCML and the NLL ensuring users benefit from a range of routing options and resulting in rail services that are resilient and efficient. This also enables main line access to be maintained throughout when either the WCML Fast Line or Slow Line is closed for maintenance. The Proposed Development also includes important ancillary facilities including a dedicated lorry park and Train Maintenance Depot allowing trains to be stabled, maintained and fuelled on site rather than at off-site locations. This reduces the need for trains to be moved off site, maximising the efficient use of available mainline capacity.

28.15 Finally, in addition to the intermodal terminal, the Proposed Development includes the unique proposition (for an SRFI) of being able to capture express freight traffic through the provision of quick and easy loading and unloading via a dedicated express freight terminal which seeks to capture this burgeoning market. The express freight terminal allows trains to arrive and depart in either or both directions with no intermediate shunting.

Employment Benefit

28.16 Once fully constructed and operational, the Proposed Development would support over 8,000 jobs. Construction of the SRFI will create an average of 410 net additional construction jobs per year for the duration of construction. The applicant will develop skills and training measures that will maximise the proportion of jobs which are taken by local people during the construction phase.

28.17 Construction of the SRFI will also generate productivity impacts, with the construction phase expected to generate £20.4 million in Gross Value Added (GVA) per annum. Around £14.8m in business rates revenue would be generated every year.

28.18 Once construction is completed, the SRFI will be occupied by companies who will in turn employ people and create a subsequent round of economic impacts. Once occupied the Proposed Development is expected to directly and indirectly create 12,410 net additional FTE (full time equivalent) jobs in the national economy.

28.19 There would be significant employment and productivity benefits arising from the Proposed Development.

Transport Benefits

28.20 The package of highway proposals is set out in the WebTAG complaint Transport Assessment (TA). The highway proposals comprise a range of junction improvements, pedestrian and cycle improvements, Travel Plan measures, safety schemes and environmental enhancements. The proposed improvements to J15a of the M1 would provide a significant benefit to the operation of the wider highway network with trips returning to major routes and away from, in some case, minor routes. The Proposed Development would retain connectivity through the Main SRFI Site and enhance its permeability and accessibility through enhanced pedestrian/cycle routes and new local bus services. The mitigation package will provide an overall net-benefit and fully mitigate the impact of the SRFI satisfying the requirements of NPS paragraph 5.208.

28.21 The scale of the Proposed Development offers the opportunity to achieve a critical mass required to facilitate significant modal shift from road to rail in accordance with the objectives of NPS paragraph 2.37.

28.22 The whole purpose of SRFI is to provide the ability to transfer freight movements which are currently made on road to rail. The NPS estimates that depending on its locale, each freight train can remove between 43 and 77 HGV's from the roads. The Proposed Development would lead to a reduction of just under 53 million HGV-km per annum when compared to a road connected development with the same quantum of floorspace at the same location; this approximately is a 20% reduction.

Environmental Benefit

28.23 The provision of over 115ha of accessible green corridors landscaped areas, ecological mitigation and pocket parks on the main SRFI site are a positive proposition to the scheme. These areas would be positively managed to deliver a mosaic of woodland, species rich grassland, scrubland and amenity landscape. Over 26ha of land, located to the south of J15a of the M1 will be enhanced with additional hedgerows, scrub areas, field edge ponds, habitat provision for ground nesting birds and grazed wildflower areas. Additionally, deadwood from felled trees on the main SRFI site will be piled to create additional habitat.

28.24 The GHG assessment for the Proposed Development estimates a 307% reduction in operational GHG emissions from a current baseline and 739,668 tonnes of CO_2 will be saved through the shift of freight from road to rail.

Potential Adverse Impacts and measures to avoid, reduce, or compensate for any adverse impacts

28.25 By their nature, NSIPs are of significant scale and size. In the case of any SRFI, there is a need for the site to be in excess of 60ha.

28.26 In this context, the NPS recognises that for developments such as SRFIs, there will be local impacts in terms of land use and in increased road and rail movements and it is important for environmental impacts at these locations to be minimised (paragraph

2.51). Further, paragraph 3.4 of the NPS notes that some (SRFI) developments will have some adverse local impacts on noise emissions, land/visual amenity, biodiversity, cultural heritage and water resources. It notes whilst applicants should deliver developments in accordance with Government policy and in an environmentally sensitive way, including considering opportunities to deliver environmental benefits, some adverse local effects of development may remain.

28.27 In terms of SRFI locations, the NPS identifies clear locational criteria to ensure SRFIs are viable and successful and notes that due to requirements (access to road and rail being essential), it may be that countryside locations are required for SRFIs (paragraph 4.84).

28.28 It is this context, any residual significant impact (that is significant impacts anticipated to arise after mitigation) should be considered in the planning balance.

28.29 For the vast majority of environmental topics assessed in the PEIR, it is not anticipated that the Proposed Development will give rise to any residual adverse effects that are considered as being significant. However, it is inevitable that some local adverse significant impacts are anticipated to occur; these include the following:

- Moderate adverse impacts associated with the permanent loss agricultural land including the loss of a small proportion of land identified as Best and Most Versatile Agricultural Land (BMV) and economic loss of farm holding.

- Some highly significant visual effects at a small number of local visual receptors (including a small number of residential properties and recreation routes and PROW) during construction and operation phases of the Proposed Development. The majority of these visual effects will reduce as the new planting is managed and matures. At year 15, the significant adverse visual effects will be generally limited to local users of recreational routes and PRoW from elevated ground and in close proximity to the Site.

- The construction of the Main SRFI Site will give rise to highly significant adverse effects to local landscape character.

- There are a number of moderate residual effects that remain during the construction and operational phases for a number of heritage assets including Milton House, Mortimers, Milton Malsor Conservation Area, Grand Union Canal Conservation Area and the grade II listed lock No 10-11). These effects, however, are all assessed to constitute 'less than substantial' harm.

Overall Conclusion

28.30 The NPS establishes a compelling need for an expanded network of SRFIs. Rail Central is one of the highest performing SRFI opportunities in the Midlands. It is close to the M1 providing access to a large proportion of the national population and on the core part of the Strategic Rail Freight Network providing access to deep sea ports. At the Regional level it has been demonstrated that there is strong market demand for SRFI which the Rail Central site can meet and this is likely to continue to grow in the future.

28.31 The Proposed Development would make an important contribution to the achievement of the main strategic objectives that the Government has identified for SRFI; namely helping the transfer of freight from road to rail and will deliver substantial economic benefits to the local and national economy.

28.32 The Proposed Development has been carefully designed to ensure that it has evolved to respond sensitively to the characteristics of the surrounding area and has sought to limit and mitigate the development's effects, as required by the NPS.

28.33 It is concluded that the Proposed Development is compliant with the other assessment principles and generic impacts set out in the NPS. The contribution to Government policy objectives including a creation of a network of SRFI and economic growth - both nationally and locally - is significant. Significant benefits would be delivered in terms of transportation, socio-economic, carbon emission and ecological impacts. These would clearly outweigh the adverse effects identified above, which have been avoided, minimised and mitigated as far as reasonably possible.

28.34 With the mitigation proposed, other impacts from the Proposed Development would be acceptable and therefore the need for the proposed SRFI and the significant benefits that the Proposed Development would deliver would far outweigh the adverse effects.

28.35 Therefore, the Proposed Development is consistent with the NPS, and benefits from the presumption in favour of the grant of development consent. Granting consent will not:

- Lead to the UK being in breach of its international obligations;
- Be unlawful;
- Lead to the Secretary of State being in breach of any duty imposed by or under any legislation;
- Result in adverse impacts of the development outweighing its benefits; or
- Be contrary to legislation about how decisions are to be taken.

28.36 Development consent should therefore be granted for the Proposed Development.